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STATUE OF KING HAREMHAB AND QUEEN MUTNODJME AT TURIN

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EDITORIAL FOREWORD

FOR the first time since the end of the war the Society has been able to send an expedition to excavate in Egypt. The preliminary negotiations with the Department of Antiquities were carried out by Professors Emery and Glanville, who have expressed marked appreciation of the cordiality and ready co-operation of the Egyptian officials with whom they came into contact, especially Dr. Mustafa Amr, Director of the *Service des Antiquités*, to whom we express our grateful thanks. It was eventually decided that Professor Emery should resume his excavations of the years before the war in the cemetery of the Archaic Period at Saqqārah on behalf of the *Service des Antiquités*. His colleagues on the work were Mr. T. G. H. James, Dr. A. Klasens, Mr. R. Anderson, and Mr. C. Burney, while a special meed of gratitude is due to Mrs. Emery for running the camp and looking so indefatigably to the welfare of its members.

Digging began early in January, and the excavators quickly came upon a large mud-brick tomb, clearly of the First Dynasty, close to the tomb of Queen Merneit. The newly discovered tomb, which bore on its exterior the recessed panelling in mud brick usual on tombs of this date, exhibited one unique feature; a low bench of mud brick runs around the base of the exterior, and on it is a series of bulls' heads modelled in sun-dried clay and provided with real horns. The significance of this remarkable feature is not clear. The tomb, which appears to be that of King Wadjet (Djet), the fourth king of the First Dynasty, was robbed and the burial chamber burnt apparently not very long after the interment, but very many jars of stone and pottery and also labels and jar-sealings have survived, and it is upon these that the provisional identification of the owner of the tomb is based. As a result of the burning of the burial chamber the superstructure collapsed, but the damage was partly restored by Ḳa'a, last king of the First Dynasty. Excellent photographs of the results of the excavations appeared in the *Illustrated London News* of 23 May 1953, and it is hoped that the manuscript of the full publication will be ready for printing by the end of the year.

At Luxor Miss Moss and Mrs. Burney were busy in the Theban necropolis collecting notes for the *Topographical Bibliography*, while Dr. Barns, M. Mekhitarian, Father Janssen, and for a while Mr. James, gathered material for Professor Säve-Söderbergh's projected monographs on certain Theban tombs.

On 17 June, on the invitation of the Provost, the centenary of the birth of Sir W. M. Flinders Petrie, the first Edwards Professor of Egyptology, was celebrated at University College, London, in the presence of a very considerable concourse of Egyptologists, both English and foreign. The true date fell on 3 June, but owing to the Coronation the commemoration was postponed for a fortnight. An exhibition in the Museum of Egyptology of antiquities excavated by Sir Flinders Petrie was opened by Lady Petrie in the presence of the Provost, to whom she handed a cheque for £100 as a first contribution towards providing a Petrie Scholarship in field archaeology. After an interval to view

the collection and to take tea, Professor S. R. K. Glanville delivered a most interesting lecture on Petrie's life and work, and the proceedings terminated with dinner in the College. All who were present were most grateful both to the Provost for making the celebrations not only possible but so enjoyable, and to Professor Emery and especially to Mr. A. J. Arkell for providing so attractive an exhibition. It was open throughout the summer, and other special exhibitions were on show at the British Museum, at the Institute of Archaeology of London University, and at the Ashmolean Museum, Oxford.

Since the *Journal* last appeared, the Archaeological Survey has published *The Mastaba of Khentika called Ikhekhi*, by T. G. H. James. The tomb is that of a vizier of the Sixth Dynasty, and contains an unusual scene of the owner painting a symbolic picture of the seasons of the Egyptian year. The cost to members is £4.

The many Egyptologists who have been the guests of our President and of Lady Greg in their beautiful Cairene home will have heard with great regret of the passing of their hostess. None will fail to remember her great charm and kindness, but not all may be aware of her outstanding artistic talents, for in her earlier years she had been both an admirable portrait-painter and an accomplished pianist.

We have also to record with regret the death of Professor Hermann Ranke on 22 April 1953, in his 75th year. Originally Professor at Heidelberg, the rise of the Nazis sent him to America, where he was particularly associated with the Philadelphia Museum, but after the war he was able to return to Heidelberg, where he died. He is best known by his invaluable *Ägyptische Personennamen*; of his other works we cannot pass over his *Keilschriftliches Material zur altägyptischen Vokalisation*, published in 1910 in the *Abhandlungen* of the Prussian Academy.

The Editor has been requested to insert the following notice in the present volume:—

SUPPLEMENTUM EPIGRAPHICUM GRAECUM

THE TWELFTH and subsequent volumes of *S.E.G.* will take the form of an annual review of Greek Epigraphy. As far as possible, it will give references to work done during each year on or relating to Greek inscriptions, and will reprint new or emended texts. The arrangement of the contents will be by geographical areas, on the general pattern of the early volumes of *S.E.G.* The editor and publishers are confident that this will be a service which epigraphists, and classical scholars generally, will appreciate and find helpful.

The editor would, therefore, be grateful if scholars who publish studies on Greek Epigraphy, or substantially using epigraphic material, would send him a notice (or if possible a reprint) of their work. Their co-operation in this way would be much appreciated, and would greatly aid him and the publishers in making *S.E.G.* as complete as possible.

All communications should be addressed to:

A. G. WOODHEAD, ESQ.,
CORPUS CHRISTI COLLEGE,
CAMBRIDGE,
ENGLAND.

Part II of Volume XI, which was left unfinished at the death of the previous editor, Dr. J. J. E. Hondius, will be published as soon as possible.

THE MEMPHITE TOMB OF THE GENERAL HAREMHAB

By SIR ALAN GARDINER


EARLY in the nineteenth century an exceptionally finely sculptured tomb belonging to the 'Great Commander of the Army' Haremhab was discovered at Memphis, dismantled, and its blocks scattered among many collections. During these last decades further fragments have come to light, so that the bibliography Porter and Moss, *Top. Bibl.* III, 195-7 requires some supplementing. That the tomb-owner was the great personage who subsequently became king of Egypt was recognized by the earliest Egyptologists through the uraeus which adorns his brow, but it remained for Breasted (*ZAS* 38, 47 ff.) to show that this uraeus was everywhere a later addition; consequently the construction and original adornment of the tomb must date from a time when Haremhab was merely the most powerful of his Pharaonic master's subjects. Opinions have been divided as to whether the reign in question was that of Akhenaten or that of Tutankhamūn. The latter alternative seems the more probable owing to the traditional character of the one religious scene that has survived,¹ as well as from the constant references in the dedicatory inscriptions and on the great stela in the British Museum to such old national deities as Rē, Harakhti, Hathōr, Thoth, and Osiris. Allusions to the Aten are scanty,² but mentions of Amūn, though attributing to him an important role, are equally rare.

Here attention must be confined to the scenes and texts referring to relations with neighbouring countries and to foreign campaigns that cannot have been wholly fictitious. The most explicit statement of the latter is on a block, now lost, seen many years ago in a private collection in Alexandria. The inscription, possibly none too well published,³ reads as follows:

... he was sent as King's Envoy to the region of the sun-disk's uprising, returning in triumph, his [attack] having succeeded. No foreign land stood before him, he [had des]poiled(?) them in the completion of a moment. His name was pronounced in ...; he did not [delay?] in going northwards, and lo, His Majesty arose upon the throne of Offering-bringing. There were brought (?) [the offerings] of south and north, while the Hereditary Prince Haremhab stood beside. ...

Here the word for 'go northwards' or more literally 'downstream' suggests return from a raid into Nubia, with which a little imagination will connect the relief in the

¹ Depicting Haremhab ploughing in the Fields of Yaru, *JEA* 7, pl. 5.

² There seem to be only two, if one ignores the use of the word in l. 2 of the lost inscription translated below. The two are (a) the name of the regiment commented upon on the next page, and (b) the sign  with hands seen in our fig. 2.

³ *Proc.SBA* 11, 424. What is there printed often does not carry conviction, but it seems unjust to condemn Wiedemann's copy without seeing the original, especially since the text given by him on the next page is apparently faultless; for this latter see below p. 6, n. 3.

Bologna Museum showing a group of negro slaves sent as tribute to the king;¹ *the pick of these*, we are informed, were *to serve as fanbearers*,² while the rest were to find employment in *the workshop of divine offerings*. The only other verbal reference in the tomb to military operations is among epithets given to Haremhab on a doorpost now in Cairo, and repeated identically in a vertical column bordering one of the reliefs; here he is described as (*a henchman*) *at the feet of his lord on the battle-field on this day of slaughtering Asiatics*.³

More interesting, if not more informative, are the representations sculptured upon the tomb-walls. A noble scene,⁴ unhappily almost devoid of descriptive hieroglyphs, displays Haremhab being loaded with golden necklets by obsequious attendants, while a scribe is at hand to give instructions or to take note of the proceedings. The reason for the honour is apparent from the rows of manacled captives led forward from the rear by Egyptian officers. The central register is headed by a Syrian prince whose special importance is stressed by his bulkier form and evident anger at the predicament in which he finds himself. Among the many figures is that of a Syrian woman carrying a child upon her shoulder. In the register below, where only the heads remain, many more prisoners are seen, among whom are conspicuous, besides the Syrians, a Libyan, and what are thought to have been two Hittites.⁵ The faces are portrayed with an attention to racial and individual expression that is most unusual. At the top of the same great block, in a register of their own, are visible the feet of many officials of whom the first are the two royal fanbearers, and at the end of the cortège the hooves of a number of horses are still preserved.

Some lively camp-scenes preserved on blocks now in the Bologna and Berlin museums⁶ bear further witness to Haremhab's military activities. Altogether the prominence given in his tomb to relations with foreign lands proves how vital had become the problem of Egypt's position amid a restless and largely hostile world. It is unnecessary to dwell at great length on a wall of which a new fragment has come to light only comparatively recently.⁷ Here again unfettered and therefore friendly foreigners of different races are displayed bringing up the rear of a crowd of Egyptians who, no less than the rest, have their arms upraised in reverent adoration of the Pharaoh doubtless shown at the lost end of the wall farther to the right. Among the Egyptians is singled out for mention *the standard-bearer of Love-of-the-Aten Minkhary*; the name of this regiment suggests that the abandoned heresy was not yet so much a subject of abhorrence as it subsequently became.

Even more impressive is a scene that has been reconstructed out of blocks preserved

¹ Bissing, *Denkm.*, pl. 81 A, and elsewhere, but in the publications the edges of the block are always incompletely given. I have used a postcard on sale in the Bologna Museum. Closely connected with this Bologna fragment appears to be that published by I. E. S. Edwards in *JEA* 26, 1, with pl. 1.

² *Hbs fwt*, see *Wb.* III, 65, 15.

³ Pfüger, *Haremhab und die Amarnazeit*, 16.

⁴ In Leyden, Boeser, *Beschr. Leiden*, IV, pls. 21, 22. The theme is of course a common one, perhaps the earliest example being Davies, *El Amarna*, I, pl. 30.

⁵ See now O. R. Gurney, *The Hittites*, pl. 2 b, and p. 212.

⁶ Porter and Moss, *Top. Bibl.* III, 197, at top.

⁷ Vandier in *Mélanges Syriens offerts à Monsieur René Dussaud*, II, pl. 1; Cooney in *JEA* 30, 3.

in the museums of Leyden, Vienna, and Berlin.¹ To the left stood the large figures of the king and the queen, the king leaning forward over a cushioned balcony to listen to the words spoken by Haremḥab, a much smaller figure for all his obvious importance. Haremḥab, loaded with gold necklets as before, lifts his right arm to address his sovereign, while in the other hand he holds the fan which entitled him to his frequently mentioned honour of *fan-bearer to the right of the king*. What remains of his speech is given in vertical columns in front of him and over his head (fig. 1):²

(1) [Words spoken to His Majesty (?) . . . when?] came the great ones of all foreign lands to beg life from him, by the Hereditary Prince, Sole Friend and Royal Scribe Haremḥab, justified.³ He said, making answer (2) [to the King . . . foreigners] who knew not Egypt, they are beneath thy feet for ever and ever; Amūn has handed them over to thee. They incited (?)⁴ [every] foreign country (3) . . . [lands] that were unknown since (the time of) Rē.⁵ Thy battle-cry is in their hearts as (though they were) one, thy name flares (4) . . . [in] loyalty to thee. Thou art Prē⁶ (5) . . . they [have left?] their town(s)⁵ (6) . . . (7) . . . mighty arm⁶ through the command of Amūn.

¹ Boeser, *op. cit.* iv, pls. 23, 24, 24 b. The Berlin block (below, p. 10, fig. 3) is published only by Schäfer, in *Berliner Museen, Berichte*, 49, Heft 2 (1928), 34-40; reproduction of the entire scene with this added, *ibid.* 39, Abb. 3. My interpretation of the scene differs only in detail from the excellent accounts given by Schäfer and Pflüger (*op. cit.*); it is only in connexion with the inscription on the Vienna block that I claim to have improved upon their statements. I take this opportunity of adding that in studying the inscriptions of this tomb I have sedulously examined the translations by Breasted, Maspero, Schäfer, Pflüger, Helck, and, most recently of all, Wilson in Pritchard, *Ancient Near Eastern Texts*, 250-1, but have not thought it necessary to criticize them directly.

² The loss at the beginnings of lines is very considerable, but impossible to estimate at all accurately. Of l. 6 there is left only a lacuna above Haremḥab's fan. For l. 7 see fig. 2; this line ends much higher up, above the heads of the courtiers or envoys to foreign lands; see the description of the scene below.

³ The tomb-owner here receives the epithet *msc-hrw* which will be his when he is dead.

⁴ *Thm*; it is not clear which of the many meanings of this not too common verb (*Wb.* v, 321) was here intended.

⁵ For the reason why the word for 'town' (*dm*) is written as a singular see below p. 9 (*j*).

⁶ The words 'mighty arm' recur in l. 8 of Haremḥab's further speech translated below; for a possible meaning see p. 8 (*h*).



FIG. 1. HAREMḤAB ADDRESSES THE PHARAOH.
(HAND-COPY)

The lacunae are too great for it to be possible to be sure of all details, but the general drift is clear. The king is addressed with flattering words and is assured that his might extends over all lands. And now foreigners have come to beg for help, which by Amūn's command the king will surely give. Farther to the right the reliefs subdivide into two registers. In the lower one Haremḥab, decked out exactly as before, but now looking towards the right, listens to the words of a smaller personage whose figure is similarly duplicated. The huddled group of foreigners to whom this man turns proclaims him to be an interpreter. A raised surface above his head had been prepared for the words spoken to or by him, but was never filled. The foreigners, who are not manacled, lift their arms in adoration, showing that despite the distance separating them from the figures of the king and queen, they too were thought of as in the royal presence. Of the eight chieftains shown, five are Syrians, of whom one lies prone on his face and another on his back; as Schäfer has aptly pointed out, this recalls the words of one of the 'Amārna letters 'At the feet of the King, my lord, I cast myself down seven times and seven times on breast and back'. Since these people, for all their appearance of humility, are not prisoners, they will doubtless have been *the great ones of all lands who came to beg for life* mentioned in Haremḥab's speech to the Pharaoh. Here the words of *all lands* are of importance, and are reinforced by a similar expression at the beginning of the second speech of Haremḥab still to be translated. These comprehensive phrases are illustrated furthermore by the presence among the suppliants of three men of whom two appear to be Libyans, while the third was supposed by Schäfer, apparently wrongly, to be a negro.¹ Thus the entire picture is seen to have been, not one of a single occasion, but a synthesis of what had occurred repeatedly or over a long space of time—in fact a sort of pictorial generalization. The scene ends on the right with small-scale representations of beardless Syrians leading horses. These may well be the youthful grooms who were employed to transport the foreign suppliants to Egypt from their distant homes.

Much less is preserved of the upper portions of the same wall, but new light has been cast upon the entire scene through Breasted's recognition² that a large block in Vienna fits directly on to the one in Leyden bearing the interpreter, as well as through the purchase of adjoining blocks for the Leyden and Berlin collections. Not only have these additions completed the group of Egyptians to be thought of as facing the figure of Haremḥab seen below in converse with the interpreter, but they have also assigned its proper place to the inscription above the Egyptian officers on the Vienna block. That inscription had long ago been well published by Wiedemann³ and von Bergmann,⁴ and has often been translated. A phrase on the adjoining block misunderstood by Schäfer and his successors shows that these fragmentary ten columns are to be read from left to right and not from right to left as has always hitherto been done. A hand-copy is

¹ Säve-Söderbergh, *Ägypten und Nubien*, 163–8, gives a detailed discussion of the scenes in this tomb so far as they concern Nubia, and his conclusions should be carefully pondered. In particular he argues cogently against the supposition that the suppliants included a negro among their number. The long sleeves seem to suggest he was some sort of Syrian.

² *ZAS* 38, 47.

⁴ *ZAS* 27, 126. See too Wreszinski, *Aeg. Inschr. Wien*, 50–52.

³ *Proc.SBA* 11, 425.

here given in fig. 2 with the lines renumbered in their proper sequence.¹ I interpret as follows:

(1) [What was said by . . . Haremhab to the King's Envoys sent to ?] every foreign land^(a): Thus saith (2) [Pharaoh^(b) to . . . all his officers ?]^(c) . . . starting from the southern end of Cush (3) [to the uttermost parts

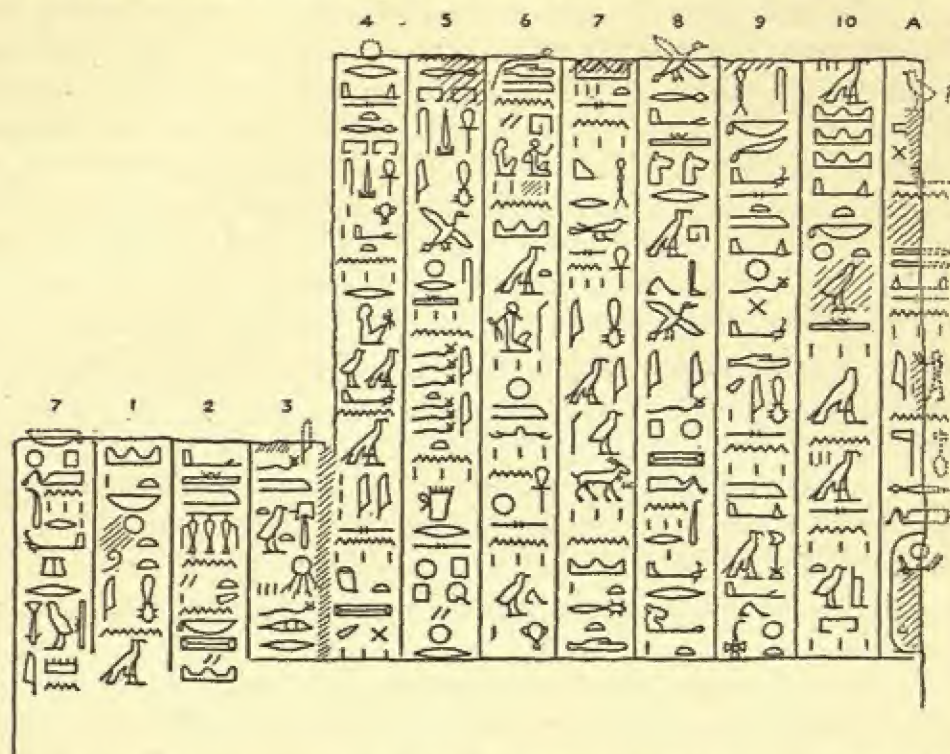


FIG. 2. HAREMHAB ADDRESSES THE EGYPTIAN OFFICERS. (HAND-COPY)

of Asia? . . .] he (?) being in his rays^(d). Made (4) . . . Pharaoh has placed them upon your hand(s)^(e) so as to guard their boundaries (5) . . . of Pharaoh according to the manner of the fathers of your fathers since primeval time(s). And (6) . . . [it has been reported that?] some foreigners who know not (how) they may live are come from^(f) (?) (7) . . . their countries are hungry, and they live like the animals of the desert, [and their child]ren(?)^(g) (8) . . . the Great of Strength^(h) will send his mighty arm in front of (9) [his army? . . . and will] destroy them and plunder⁽ⁱ⁾ their town(s)^(j) and cast fire (10) [into]^(k) . . . [and] . . . the foreign countries will (?) set others in their places.

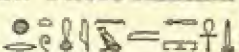
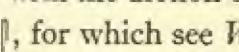



COMMENTARY

It will be recalled that the wall depicts Haremhab twice. Once he looks left and addresses adulatory words to the Pharaoh. The other figure, back to back with the first, looks right and presents him (1) in converse with the interpreter, and (2) speaking to the group of officers or officials in the register above. All the columns of inscription beside and over these figures have suffered great loss at the top, but the direction of the hieroglyphs affords precious evidence to which of the figures the legends belong. It appears to have been the general rule (see *JEA* 38, 8) that the hieroglyphs should face in the direction in which the words of the speaker would fly. Now the hieroglyphs of

¹ I am deeply indebted to Dr. Winter for a careful new copy obtained for me by the kind offices of H. Junker. Since fig. 2 was prepared I have received through the courtesy of Professor Komorzynski, the keeper of the Vienna collection, an admirable photograph which will be deposited in the Griffith Institute at Oxford.

the speech to the Pharaoh face left, as may be seen from fig. 1, as well as from all that remains of its last column (l. 7, in fig. 2); see the translation above. Immediately to the right of this the hieroglyphs face right, and it will be seen shortly that cols. 1-10 record the speech of Haremhab to the officers in agreement with the principle just formulated. However, what is true of the hieroglyphs is not always true of the columns. In the speech to the king, the sequence of columns is from left to right, contradicting the direction in which the hieroglyphs face. In the speech to the officers, on the other hand, the direction of the hieroglyphs and the sequence of columns agree. The problem here adumbrated deserves study in a wider perspective.

(a) The words preceding 'Thus saith [Pharaoh]' must have recorded that Haremhab was speaking, but the remainder of my suggested restoration is of course doubtful.



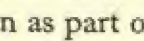
(b) This is the phrase that has baffled all my predecessors and which proves that the inscription is to be read from left to right. Those familiar with the diction of this period will recognize the stereotyped formula  = , for which see *Wb.* II, 44, 3; the best-written examples are *Medinet Habu* (*Chicago*), 29 and *Leps.*, *Denkm.* III, 230 ('Aniba), while Davies and Gardiner, *Tomb of Huy*, pl. 6, has, as here,  in place of *hr-tw*. A partial explanation of this last curious writing can be given. When the idiom occurs in the 3rd pers. sing. the *r* of *hr-f* was apt to be written small like a *t*. Then  was misinterpreted as the preposition . For examples of this final stage see *Ramesside Administrative Documents*, p. 55 a, n. 9^a.—Pharaoh's message is reported in the third person, see cols. 3, 4.

(c) The suffix 2nd pers. plur. in cols. 4, 5 shows that the officers or officials depicted in the scene must have been mentioned somewhere in the preceding lines, and my own view is that the words 'starting from the south of Cush etc.' defined the regions where their duties took them. Cf. the words of Pharaoh to the King's Son of Cush in the tomb of Huy.


(d) This phrase, which possibly still refers to the Aten (see above, p. 3, n. 2), clearly describes the favour shown to Pharaoh by the sun-god, but how this entered into the present context is obscure.

(e) I.e. has put them in your charge. No other example of this expression has been found.

(f) This col., together with the next, appears to give the reasons which have caused the suppliants to come and beg for help. Apparently some enemy invaders had driven them from their homes, and thus deprived them of the means of living.

(g) 'Children' is Bergmann's suggestion (*loc. cit.*). It assumes that = has been faultily written for , as indeed we have seen in the word *hr-tw* of col. 1; it is difficult to explain  otherwise than as part of .

(h) I.e. of course Pharaoh. It seems conceivable that the 'mighty arm' whom Pharaoh will send was intended to be understood as Haremhab himself; it is significant that the phrase occurred above in the last line of Haremhab's address to Pharaoh (fig. 2, col. 7).

(i) The construction  + infinitive is very rare, *Wb.* II, 177, 15 quoting only this example and one from a passage in Haremhab's Decree (l. 19), which is too defective for us to be sure of the time involved. However, in the Nauri Decree, ll. 50, 54, 93, as

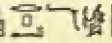

I pointed out *JEA* 14, 95, *mdt* + infinitive takes the place of *hnc* + infinitive (*ibid.* 46-47, 79), the use of which to continue imperatives and in similar future constructions is well known. There can be no doubt, accordingly, that Pharaoh, in granting the request of the petitioners, threatens to destroy and sack and set fire to the possessions of their enemies, who will then be dispossessed and replaced by others.

(j) Both here and in l. 5 of the inscription translated above p. 5, the Egyptian writes *dmt·sn*, literally 'their town', but in English we must render 'their towns'. Egyptian frequently uses the singular before a plural suffix-pronoun when the owners each possess only one of a thing, e.g. a nose or a mouth. This idiomatic use is not confined to parts of the body, cf., for example, 'their works (on tombs and cenotaphs) were in course of construction *dr hsw nb·sn* since the time of their lord(s)' *Inscr. dedic.* 41.

(k) *Hsc ht [r]*, see *Wb.* III, 227, 9, where, however, this example is overlooked, as well as the even better one *P. Tur.* (Pleyte and Rossi) 135, 10.

When Haremhab had become king and the uraeus had been affixed to his forehead throughout the tomb, a number of columns of inscription were added at the end of Haremhab's speech which has just been translated. All that remains is marked as A in fig. 2. The hieroglyphs face left, and this fact, coupled with their content, shows that they recalled the gratitude to Pharaoh of the foreign petitioners whose cry for help has been so sympathetically received. The few remaining words may be rendered

... they answer (?)¹ [the Lord] of the Two Lands. They give praises to the [good] god, him of the great strong arm, Djeser[khepru]rē-setpen[rē] . . .

It still remains to discuss the identity of the high-ranking Egyptians to whom Haremhab communicates the wishes of Pharaoh.² One of them seems to wear a plainer costume than the rest, but it is doubtful whether he was a vizier, as Pflüger supposes.³ In defence of his view it may be admitted that by this time Haremhab undoubtedly took precedence of the two viziers, since Spiegelberg⁴ was certainly right in recognizing him in the  *Royal Scribe, Hereditary Prince and Commander of the Army* who precedes the viziers in the relief of a funeral procession from another Memphite tomb.⁵ But I prefer to think of the officers or officials as either the King's Envoys  *ipwtj nsw*⁶ sent to the foreign lands here concerned or else military governors who were stationed there. In the lack of explicit information this question must be left unsettled. Summing up the significance of all the scenes and inscriptions of the tomb we gain the impression, not of an Egypt warring against external enemies, but of an imperial power exercising, by forceful means whenever necessary, its beneficent protection over foreign tributaries or virtual subjects. How far this conception is justified must be left to the historians to decide.

The titles given to Haremhab in his Memphite tomb have been elaborately studied by

¹ Perhaps *wf[b]·sn*, but there seems no room for — before *[nb] twy*.

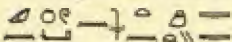
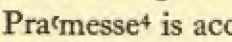
² In fig. 3 is reproduced the fragment bought for the Berlin Museum and published only in Schäfer's article, see above p. 5, n. 1 and p. 6, ll. 36-8. The print from which the figure is made was given to Černý by the regretted B. Grdseloff.

³ *Op. cit.* 18.

⁴ *ZAS* 60, 56-58.

⁵ *ZAS* 33, 18-24 with pl. 1.

⁶ See above in the inscription translated p. 7, with note a on p. 8.

I agree with Helck in his view¹ of the literal appositeness of Haremhab's epithet  *Deputy of the King in front of the Two Lands* and its close variants.² All we know of Haremhab's relation to the youthful Tutankhamūn suggests that he acted as regent on his behalf during his minority,³ and from the fact that the Vizier Pra'messe⁴ is accorded on his Karnak statue the almost identical attribute  *Deputy of His Majesty in Upper and Lower Egypt* we may conjecture with probability that he exercised the same function for Haremhab during the latter's old age. Pflüger's view that the title *idnw* as applied to Haremhab refers to military rank rests on a misconception. In the admirable article by H. Brugsch⁵ in which he was the first to establish the meaning of the word *idnw* he pointed out that this term, like its Arabic equivalent *wakil*, means simply 'deputy' or 'substitute', so that the actual functions that it represents depend upon those of the personage of whom the man receiving the title is the substitute. Sometimes that personage is indicated or hinted at by a following genitive, but sometimes we are left to deduce from the context the sphere of activity belonging to a particular *idnw*. When this word is followed by *n mšr* 'of the army' we may often conclude that the holder of the title was the active representative of the *imy-r mšr* 'Commander of the Army' or 'General'. In Nubia, on the other hand, the *idnw* of Wawat and the *idnw* of Cush shared between them the duties of the King's Son of Cush, perhaps himself too exalted a being to be concerned with detailed administration. So too when the term *idnw* is followed by a genitive designating the king, this may signify much or little according to the context. In the cases of Haremhab and Pra'messe, as the accompanying epithets show, they claimed to be the actual regents. In the case of the military officer Peḥsukher whom Pflüger quotes,⁶ the epithet 'deputy of His Majesty', if justified in fact at all, may mean only that in one or more campaigns he, for reasons unknown to us, took the place of his sovereign.

In conclusion, I make bold to enter a protest against the extremely complex and fine-spun theories which Pflüger and Helck have woven around the personages of Haremhab and his predecessors. For Pflüger the whole history of the Aten heresy and its final exorcism by Haremhab was a political struggle between the workers and the landed gentry, Haremhab being the champion of the counter-revolution. Helck rejects Pflüger's interpretation and views the entire development as a conflict between the official classes and the military, the latter taking advantage of Akhenaten's quarrel with the old-established priesthoods to win power for themselves. All this seems to me to go far beyond what is warranted by the facts at our disposal. If Egyptology is to remain a science and not to become a branch of fiction, we must surely learn to content ourselves with quite misty, unspeculative notions concerning the events and the people

¹ Op. cit. 79, top.

² These are *idnw n nsw m t r dr-f* and *idnw n hm-f m t r dr-f*, see for references Pflüger, op. cit. 57, nn. 87-89.

³ The much damaged statue Cairo 42129 (Legrain, *Statues de rois et de particuliers*, I, 81) is apparently the only monument of Haremhab which explicitly mentions Tutankhamūn. Of Haremhab's relation to Ay we know absolutely nothing.

⁴ *Ann. Serv.* 14, 30.

⁵ *Rev. égyptol.* 1, 22 ff.

⁶ Op. cit. 57, n. 88.

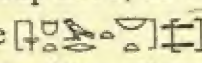
introduced to our notice by the inscriptions.¹ Just as in our modern daily life most people have to content themselves with the sketchiest notions about current happenings, and yet derive much interest and even some degree of benefit from the opinions they form about them, surely so also we must do in the case of Ancient Egypt, where the paucity of evidence effectually bars the way to really precise knowledge. I trust, however, that these remarks will not be taken as sign of a lack of appreciation for the great industry and ingenuity of the two scholars whom I have ventured to criticize.

¹ Let anyone who thinks this judgement too harsh read the pages in which Helck sets forth Ay's motives and policy (*op. cit.* 73 ff.). He rejects Pflüger's reconstructions (*op. cit.* 76, n. 5) only to replace them by others which may in their general lines be correct, but which in the detailed form he gives to them are the purest phantasy.

THE CORONATION OF KING HAREMHAB

By SIR ALAN GARDINER

IN this Coronation year of Her Majesty Queen Elizabeth II of England an Egyptologist's thoughts travel back easily to a comparable event that occurred well over three thousand years ago. Temple-scenes depicting a god placing the crown on a young sovereign's head are not uncommon, but verbal descriptions of the accompanying ceremonies are very rare. Indeed, there exists none more straightforward and perspicuous than that which forms the subject of the present article. The inscription at the back of Haremhab's statue in the Turin Museum has interested me ever since, some fifty-five years ago, I read it for the first time with my revered teacher and friend Francis Llewellyn Griffith. Like so many other Egyptian historical texts this one has remained down to the present day without a completely accurate publication,¹ a lacuna in our documentation which the gracious help of the Director of the Turin Museum enables me now to fill. Not only did Professor Scamuzzi supply the splendid photograph shown here in pl. I, but he also equipped me with a series of photographs and rubbings, and, above all, with a squeeze which, checked with my own careful hand-copy from the original, has provided the material for Miss Broome's admirable reproduction of the text in pl. II. The hieroglyphs being very indistinctly cut in the dark-grey granite, an absolute facsimile was neither feasible nor yet really desirable, but our plate approximates closely to one and will, I believe, be found completely trustworthy.²

The group itself, of excellent workmanship, represents Haremhab seated beside his queen, the  [Great Wife of the King, Lady of] the Two Lands, Mutnodjme, beloved of Isis, mother of the god, may she live eternally. Our business being solely with the inscription on the back, details concerning the actual figures are left to those better qualified to deal with them.³ Nevertheless, I cannot refrain from drawing attention, as many have done before, to the extraordinary depiction of a female winged sphinx worshipping in front of the queen's cartouche. This

¹ The text, S. Birch in *Trans. SBA* III, 486-95 with two plates drawn by J. Bonomi; H. Brugsch, *Thesaurus* 1073-8, these two perhaps the only independent ones. The main translations are: Breasted, *Anc. Rec.* III, §§ 22-32; Maspero in Th. M. Davis, *The Tombs of Harmhabi and Touatânkhamanou*, pp. 9-11, 19-21. I have also made some references to Brugsch's rendering in his *Geschichte Aegyptens*, 440 ff. and to notes by Erman in his *Chrestomathie*, 51* ff.

² Apart from some broken and uncertain groups at the beginnings of ll. 4. 5. 10. 13, the only points in doubt are: l. 6, the small sign following *r-hry*, possibly meant for \bigcirc rather than \ominus ; l. 12, the signs after *sms*, doubtless to be understood as our $\text{—} \text{—}$; l. 21, the determinative of *nhm*, more likely to be the tree — than a sceptre. In l. 8 — is very thin and badly made, as also is the — of *hr's* at the end of the line. In l. 19 — of the Horus-name is no more than a thickish tapering stroke.

³ See particularly Champollion, *Lettres à M. le Duc de Blacas*, 48 ff.; Fabretti, Rossi, and Lanzzone, *Regio Museo di Torino*, 106; also for the figure of the queen, Roeder in *Mitt. Vorderas. Ges.* 37 (1932), pl. 4, with p. 14 (16).

occupies the upper half of the left side of the throne and is well seen in our plate. A closely similar representation, extending even to the fantastic headdress, is found on the plaque of sard formerly in the Carnarvon collection,¹ but there it is Amenophis III's cartouche which is held in the sphinx's hands. I have no certain explanation to offer.² The remains of a small scene above the great inscription at the back are likewise entirely cryptic so far as I am concerned.

Of considerable interest for our undertaking is a fragmentary quartzite stela of great size first noted by Daressy³ near the pylons of the temple of Ptah at Memphis. The texts were published anew and equally unsatisfactorily by Petrie a few years later.⁴ To Newberry⁵ belongs the credit of having recognized on the Memphite stela several sentences recurring *verbatim* in the Turin text. These leave no doubt that the former likewise belongs to the reign of Haremhab. On this subject see further the Appendix at the end of the present article.

Translation

(1) [Life to the Horus 'Strong Bull, ready of plans', Two Goddesses 'Great of marvels in Ipet-esut', Horus of Gold] 'Satisfied with Truth, fostering the Two Lands', King of Upper and Lower Egypt, Lord of the Two Lands 'Djeserkheprurē-setpenrē', Son of Rē, Lord of Diadems, 'Haremhab'-miamūn', [beloved of] Horus, lord of Hnēs^b,[?] [given life eternally?].

(2) [offshoot of?] Kamēphis;^c Amūn King of the Gods (was he) who nursed him;^d Horus, son of Isis, his guardianship was the talisman of his flesh. He came forth from the body clad in majesty, the aspect^e of a god upon him. He made . . . (3) Bowed unto him was the arm in youth, the ground kissed by^f great and small. Food in abundance attended^g him while he was (still) a child without understanding^h . . . (4) courtiers(?) . . . of the entire people. The form of a god was his aspect in the sight of him who beheld his dread (?)ⁱ image. His father Horus placed himself behind him,^j his creator made his protection.

One generation passed, another (5) [came]^k he knew the day of his good pleasure to give him his kingship.^l Lo, this god distinguished his son in the sight of the entire people, (for) he desired to enlarge his gait^m until should come the day of his receiving hisⁿ office, causing (6) [him] of his time,^o and the heart of the king being content with his dealings, and rejoicing at the choice of him. He^p set him to be supreme chief^q of the land in order to steer the laws of the Two Regions as Hereditary Prince of this entire land. He was unique, without a second. [His] plans (7) [and the people were happy] at the utterance(s) of his mouth, he being summoned before the Sovereign when it, the Palace,^r fell into rage, and he opened his mouth and answered the king and appeased him with the utterance of his mouth. Alone efficient, without (8) all his plans were as the gait of the Ibis, his conduct (in the) form of the Lord of Ḥasrō,^s rejoicing at Truth^t like the Beaky one, delighting over her like Ptah, he woke in the morning that he might make presentation of her, she being placed (9) his dealings, treading upon her path, she it is shall make^u his protection upon earth for the length of eternity.

Now he acted as vicegerent^v of the Two Lands over a period of many years (and) reported (10)

¹ *JEA* 3, pl. 11.

² Nor has C. de Wit, *Le rôle et le sens du lion*, 55, where other analogous depictions are quoted. Some connexion seems possible with the coronation statues studied by Militza Matthiew, *JEA* 16, 31 f. Can the female sphinx be the goddess Tephēnis as in the scene from Es-Sebu'a quoted by Mme Matthiew from *Leps., Denkm.* 111, 182, e?

³ *Ann. Serv.* 3, 27 f.

⁴ Petrie, *Memphis I*, pl. 6.

⁵ *Ancient Egypt* [x], 1925, 4.

. the councillors doing obeisance at the gates^w of the King's House, the great ones of the Nine Bows approaching him, South as well as North, their arms outstretched at his encounter, and they paid honour^x to his face as (to) a god. And all that was done was done at [his] command (11) his tread, his majesty being great in the sight of the populace. Prosperity and health were prayed for on his behalf: 'Assuredly^y he is the father of the Two Regions, (of) precious understanding by the gift of god to bring to port (12) [this land?]'^z

[Now when many days] had passed over these things, the eldest son of Horus^{aa} being supreme chief and Hereditary Prince of this entire land, lo, this noble god Horus of Hnēs, his heart desired to establish his son upon his eternal throne, and [he] commanded (13) Amūn. Then did Horus proceed amid rejoicing to Thebes, the city of the Lord of Eternity, his son in his embrace, to Ipet-esut^{bb}, in order to induct^{cc} him into the presence of Amūn for the handing over to him of his office of king and for the making of his period (of life).^{dd} And lo, (14) [Amūn] [arisen]^{ee} in his beautiful festival in Southern Opē.^{ff} Then did the Majesty of this god see Horus, lord of Hnēs, his son with him in the King's Induction^{gg} in order to give to him his office and his throne. And lo, Amen-Rē^h joined in the jubilation when he had seen (15) on the day of making his submission^{hh}. Thereupon he betook himself to this noble, the Hereditary Prince, Chieftain over the Two Landsⁱⁱ, Haremhāb. Then did he proceed to the King's House^{jj} (when) he had placed him before himself^{kk} to the Per-wēr^{ll} of his noble daughter the Great-(16)[of-Magic^{ll}, her arms] in welcoming attitude^{mm}, and she embraced his beauty and established herself on his forehead,ⁿⁿ and the Divine Ennead, the lords of Per-neser,^{ll} were in exultation at his glorious arising, Nekhbe, Edjō, Neith, Isis, Nephthys, Horus, Seth and the complete Ennead that presides over the Great Seat^{oo}, (17) [and they raised?] thankful clamour to the height of heaven, rejoicing at the good pleasure of Amūn.^{pp} 'Behold, Amūn is come, his son in front of him, to the Palace in order to establish his crown^{qq} upon his head and in order to prolong his period like to himself.^{rr} We have gathered together that we may establish for him^{ss} (18) [and as]sign to him the insignia of Rē^{tt} and may pay honour to Amūn on his account. Thou hast brought us our saviour. Give him the jubilees of Rē^{tt} and the years of Horus as king. He is one who will do what thy heart pleases^{uu} in Ipet-esut and likewise (in) On and Hikuptah.^{vv} He is one who will enrich them.'^{ww}

(19) There was made the great name of this good god and his titulary like the Majesty of Rē^h, namely,

Horus 'Strong Bull, ready^{xx} of plans';

Two Goddesses 'Great of marvels in Ipet-esut';

Horus of Gold 'Satisfied with Truth, fostering the Two Lands';

King of Upper and Lower Egypt 'Djeserkheprurē^h-setpenrē^h';

Son of Rē^h 'Haremhāb-miamūn' given life.

Going forth^{yy} (20) from the King's House by the Majesty of this noble god, Amūn King of the Gods, his son in front of him, and he embraced his beauty, he being arisen in the *khepresh*-crown, in order to hand over to him that which the sun's disk encircles, the Nine Bows being under his feet, heaven in festival and earth full of joy. The Divine Ennead of To-meri, their heart(s) were happy, (21) lo, the entire people was in joy and they cried aloud to heaven. Great and small seized upon gladness,^{zz} the whole earth rejoiced.

Now when this festival in Southern Opē was ended, Amūn King of the Gods having returned in peace to (22) Thebes, faring downstream^{yy} by His Majesty with^{3a} the statue of Hārahkti. And lo, he set in order this land, organizing^{3b} it after (the manner of) the time of Rē^h. He renewed the temples of the gods (from) the marshes of the Delta to To-Sti.^{3c} He fashioned all their (23) images, distinguished above the original(s)^{3d} and surpassing in beauty through what he did unto them, and Rē^h rejoiced when he saw them, they having been found ruined^{3e} in former time(s). He raised up their fane(s) and created their^{3f} statues (each) in (its) own exact person,^{3g} (made) of every costly stone.

(24) He sought out the precincts^{3h} of the gods which were in ruins³ⁱ in this land and set them in order (even) as they were since the time of primal antiquity, and instituted for them regular offerings (on) every day, and every vessel of their (25) fanes was fashioned in gold and silver. He equipped them with ordinary priests and lectors from the pick of the army,^{3j} and opened up for them fields and herds equipped with all services, they rising up early to pay honour to Rē^c at the beginning of the morn(26)ing every day: 'Do thou^{3k} lengthen for us the kingship of thy son who does what pleaseth thy heart, Djeserkheprurē-setpenrē^c, and mayst thou give him millions of jubilees and set his victories over all lands like Horus son of Isis, even as he propitiates thy heart in On and thy Ennead join thee.'^{3l}



Commentary

* The *n* in the cartouche is, despite Albright (*AJS* 53, 2, n. 7), inexplicable except as a reminder of the Canaanite god Haurōn. It cannot, however, have been read, the contemporary pronunciation of the king's name having probably approximated to the Greek Ἀμμαί(s); for the loss of the final *b* see *ZAS* 50, 80 and my *Onomastica* under On. Am. 129.

^b *Hwt-nsw*, i.e. El-Kōm el-Aḥmar Sawāris, on the E. bank 5 km. S. of Shārūnah, see *Onomast.* II, 106* ff.

^c 'Bull of his Mother', an epithet of Amūn when depicted in the form of Min. Perhaps cf. *mstyw n K3-mwt-f* Cairo 34183, l. 3.

^d *Rm* doubtless a participle. In early Ramesside times direct juxtaposition of subject and predicate was by no means rare, there being a number of examples in the Leyden Hymns to Amūn, *ZAS* 42, 12 foll., see especially 3, 22-3; 5, 16-17; also *Inscr. dedic.* 41.

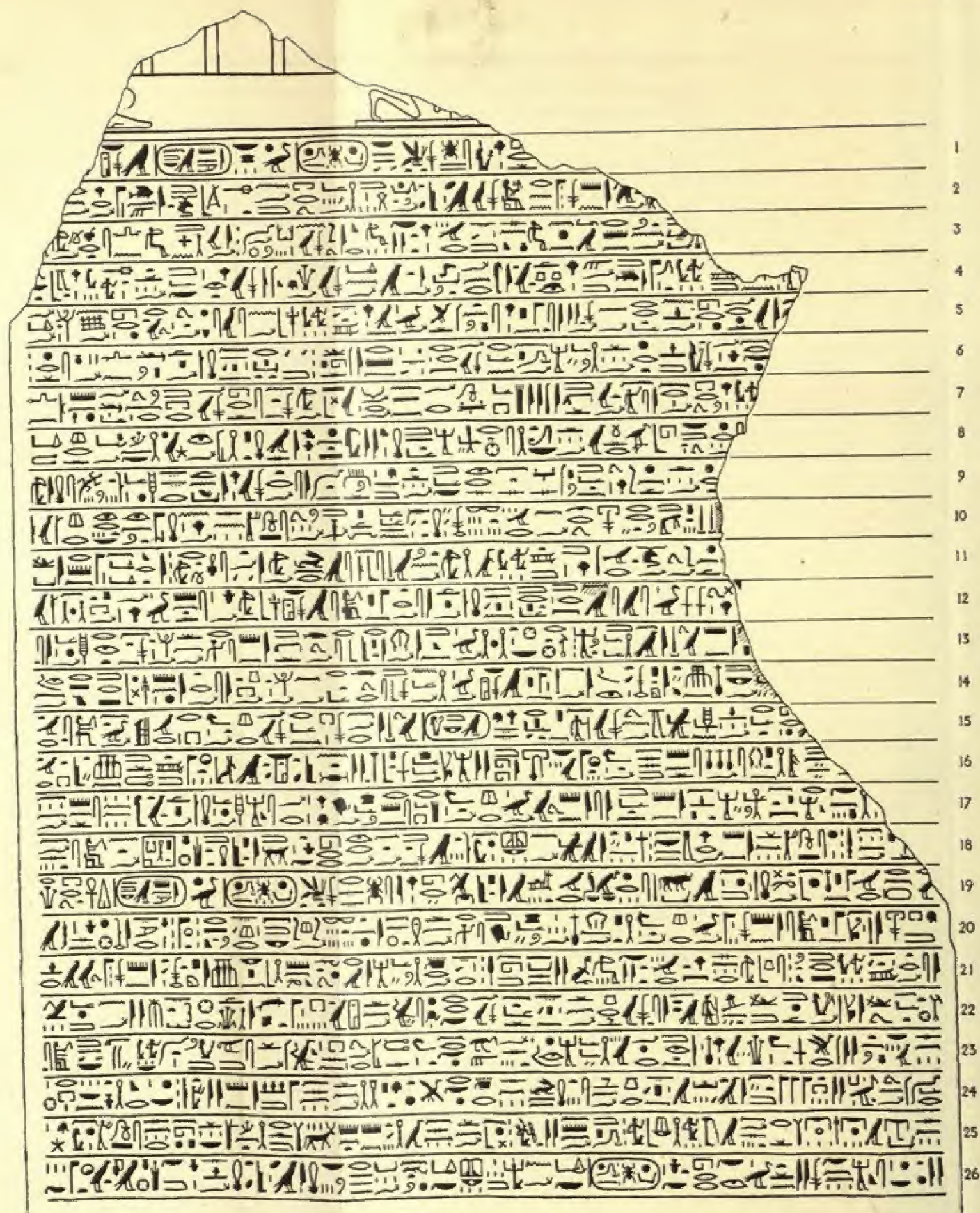
^e *In*, a common, though perverse, writing for older *hwn*, the substitution of  for  being due to (1) the influence of *imm* 'skin' and (2) similarity of the signs in hieratic. So too *Wb.* I, 52, 10 ff.

^f *M* here is hardly the Late-Egyptian writing for *in*; perhaps rather the preposition in its defining sense (*Eg. Gramm.*² § 162, 6), though there precedes no noun or suffix to be defined.

^g *Kri*, a rare verb, of which the main sense may be 'draw nigh', *Wb.* v. 39. Does this sentence suggest that the opulence with which the child was brought up presaged his future greatness?

^h For the extraordinary range of ages covered by *hwn* see *Wb.* III, 52, 2-9, and for the qualification *nn srt-f* see *Admonitions*, 16, 1; *Ann. Serv.*, 37, pl. 2, l. 21. For *srt*, a writing which is not found before Dyn. XVIII, see my note on the former passage; also *Anast.* I, 1, 4 and below l. 11. Though not so regarded by *Wb.* IV, 18, 13, this word for 'understanding' must be closely related to, if not identical with, *srt* in *Sinuhe* B48, my note on which hesitated between taking the stem as *zae gem.* or *zae inf.* I am now convinced of the latter alternative, *srt* being the infinitive and the common epithet *srt* (Janssen, *Eg. Autobiographie*, pp. 31-2 [Ar]) the participle; *Wb.* IV, 16, 2-6 takes the opposite view, as did also Sethe, *Dram. Texte*, 68.

ⁱ No grammatically sound rendering seems obtainable by separating *dgg* from the preceding *hr*, or by joining *nri-tw* to the following *it-f Hr*, as was done by Breasted and Maspero. I have taken the bold step of treating *nritw* as an adjective of a type similar to *mryty* 'beloved'.



THE CORONATION INSCRIPTION OF KING HAREMHAB

Scale 1:5

^j Another possible rendering would be 'he placed him (Haremhāb) behind himself', but the place of a protecting deity was behind the protected person, cf. the pictures of goddesses with protecting wings, and the falcon Horus in the most famous of the Chephren statues. See too below p. 19, n. *nn*.

^k *Ht hr sbt*, familiar from the Song of the Harper, was here obviously followed by *kt* [*hr hpr*], as in *Inscr. dedic.* 66 and *Mar. Abyd.* I. 51, 36, see *Wb.* III, 430, 12.

^l A glaring example of the ambiguity of Egyptian pronouns, here enhanced by the preceding lacuna. That the *f* of *hwf rh* refers to the god Horus is evident from *ntr pn* in the next clause, and Haremhāb is clearly meant by the suffix of the dative *n.f*. In *nsyt.f*, as also in *irwt.f* at the end of the line, either Haremhāb or Horus may have been intended, nor need the reference have been the same in both cases. There remains the *f* of *htp.f*, where the decision rests upon the signification to be given to *htp*. There is no room in the lacuna for a mention of Haremhāb's predecessor, so that to take this *htp* to mean that predecessor's 'going to rest', 'retirement' or 'death' (cf. *htp m cnh* in *Urk.* IV, 58, 11, the opposite of *hri*) is impossible. Brugsch rendered *den Tag seines Glückes* and Breasted 'the day of his satisfaction', suggestions that appear not far wide of the mark, particularly since the same stem in ll. 15. 17 refers to the contentment of a god.

^m I.e. increase his power and widen the scope of his authority.

ⁿ See above, n. *l*.




^o Erman's note reads: 'Ergänze etwa: er setzte [ihn an den Hof des Königs] seiner Zeit,' but *nsw* in the next clause (which can only refer to Tutankhamūn, see above, p. 3) makes this restoration rather improbable. Perhaps 'placing [him at the head of the nobles] of his time', comparing *srw n rk-k* in *Siut*, IV, 29.

^p The suffix *f* must surely refer to 'the king' in the preceding sentence.

^q *R-hry*, though indicating very exalted position (see *Wb.* II, 390, 7-9), was not a technical term in connexion with the kingship like *iry-prt* that follows—on this equivalent of our 'Crown Prince' see above p. 10. The small and badly cut sign following *r-hry* was interpreted as *o* by Brugsch, probably rightly, though such a writing of the genitival adjective after a singular does not occur elsewhere in our text; the sign is too small for *o*.

^r The construction is strange, but it is surely impossible to bind *ity rh* together as 'sovereign of the Palace'.

^s Haremhāb is here compared with Thoth, the god of knowledge and wisdom, who is referred to by three epithets. Hasrō is one of the places of his cult quite close to El-Ashmūnēn, see my *Onomast.* II, 81; for *Fndy* alluding to the ibis's long beak see *Proc. SBA* 18, 111.

^t Since Ptaḥ was *nb mrt* 'the lord of Truth', the mention of him here proves that  must be read in the previous sentence, not  'established order' as in Bonomi's plate. The writing  is rare, but is found occasionally about this time, see Wreszinski, *Äg. Inschr.* . . . *Wien*, p. 57; Berlin palette 8042; also in the Memphite stela parallel to our Turin text in Daressy's reading.

^a *Nts irr-s*, an excellent example of the future construction discovered by Gunn, see his *Studies*, 55 (80); so too *ntf irr-f hrnt ib-k* below l. 18.

^v *Idn* as transitive verb for 'to govern' is quoted by *Wb.* I, 154, 3 only from this passage and from *Kuban* 16. In the latter passage the words 'since thou didst govern (*idn*) this land' are followed immediately by 'thou didst rule (*ir-n-k shrw* cf. *ἔργον*) when thou wast in the egg, in thy office of child and Hereditary Prince (*iry-prt*)'. It is probable, therefore, that *idn* in both places has its habitual connotation of 'replacement', and in Haremhab's case there is a probable allusion to his title *idnw n nsw*, for which see above, p. 11.

^w The absence of the gate-determinatives makes it uncertain whether *r rwty* should be rendered thus (*Wb.* II, 404, 7) or as the compound preposition for 'outside' (*Wb.* II, 405, 7).

^x *Swš* appears to have an implication of 'applause', 'respectful approbation'; the stem *wsš* is often associated with *hknw*, for which the best rendering is perhaps 'acclamation', 'thankful clamour'. Here and in l. 18 'pay honour to' seems adequate as a translation of *swš*.

^y The words of the populace are here quoted without introduction. Similarly in ll. 17. 26. Read *smwn rf*, for which see my *Notes on . . . Sinuhe* 59. One would have expected *pw* after *it idbwy*, and *ikr sirt* or *nb sirt ikrt* in place of *sirt ikrt*; for *sirt* see above, n. h.

^z Perhaps restore [*t pn*] at the beginning of l. 12, though the sense *ein Land* (u. ä) *gut lenken* attributed to *mni* in *Wb.* II, 74, 8 is hardly supported by the examples in the *Belegstellen*. There is but little space for the object of *mni* (the verb rendered 'steer' before *hpw* in l. 6), since this was followed by the common phrase [*hr m-ht hrw*] *swš hr nm*, see Hintze, *Untersuchungen*, 11; for *ist rf* after this formula see *Westcar*, 2, 3.

^{aa} The abbreviated writing |*A*| or |*A*— is not unusual at the beginning of Dyn. XIX, see Gauthier, *Livre des Rois*, III, 31. 80. 125, but the description of the Crown Prince as the eldest son of Horus (see above, p. 10, n. 3) does not appear to be found elsewhere.

^{bb} *M knlw-f*, cf. *Inscr. dedic.* 45. Ipet-esut is the name of Karnak.

^{cc} *Bs*, see below n. gg.

^{dd} Breasted rendered 'to pass his life (as such)'; similarly Maspero. *Wb.* I, 223, top, does not record the meaning here suggested, but surely the implicit subject of *irt* is Horus, not the king himself. It was part of the coronation ceremonies that the new monarch's years of reign, which were also his years of life (for this meaning of *hrw* see the Royal Canon of Turin, *passim*) should be inscribed on the leaves of the *išd*-tree by Thoth or the goddess of writing, see Moret, *Royauté pharaonique*, p. 95, fig. 17 and *ibid.* pl. 2; also *JEA* 32, 50, n. g and Lefébure, *Sphinx*, 5, 1 ff.

^{ee} Doubtless read ^(*ḥw*) as in l. 20. N.B. It is at this point that the Memphite stela (above, p. 14) begins to present a narrative in places identical with that of our statue. For details, see the Appendix below, pp. 28 ff.

^{ff} This was the great annual festival of Amūn which gave the name Phaōphi to what, in the later mode of reckoning, was the second month of the Egyptian civil year. The

¹¹⁵ The writing of *bs-nsw* here shows this to be the stereotyped technical term used to denote the king's introduction by another god into a temple, see (e.g.) Lepsius, *Denkm.* III, 14. 56. 124d; *JEA* 20, pl. 3.


¹¹ *Wb.* II, 415, 19 quotes four examples of *hry-tp twy* as adjunct to *try-pct*, this being the earliest. See too Christophe, but wrongly interpreted, *Ann. Serv.* 51, 339 ff.

^{kk} Cf. *di-f sw r-ḥt-f* on a stela of Sethos I, *Ann. Serv.* 3, 113. For the right interpretation see *sw-f hr-ḥt-f* in ll. 17. 20 as well as *di-nf wi hr-ḥt hm-f* in *Urk.* iv, 158, 17, where Tuthmosis III is referring to Amūn.

^{mm} *M nyny* in later texts refers to a welcoming gesture in which the hands are lowered in front of the person welcomed. The gesture is nearly always that of some divinity, in most cases a goddess. In the Pyramid Texts, however, *nini* is a spoken word, see *Wb.* II, 203, 8 ff. I have long believed that the writing with — placed obliquely over either hand is a mere graphic pun, influenced in part perhaps by the Pyramid Text determinative of *iri* 'wash'. In any case *Wb.*'s *Begrüssung durch Wassersprengung* is a mistake; the writing above described could only picture a washing of the hands, not a sprinkling of water.

¹⁰⁰ *St-wrt*, the royal throne, *Wb.* IV, 7, 4-5.

^{pp} For *htp* see above, n. l. The remainder of ll. 17. 18 gives the words spoken by the assembled gods, a quoted utterance similar to those above in l. 11 and below in l. 26.

⁹⁹ *Hrw* 'crown' is here determined by the *khepresh*  or blue wig-like headgear. On this see below, p. 27.


¹⁰⁰ Breasted rendered *hr·f mi-kd·f* by 'his whole life', to my mind an unnatural expression, and I prefer to take *mi-kd·f* as referring to Amūn. A similar ambiguity occurs several times in Ramesses II's *Inscr. dedic.*, see Gauthier's Index, s.v. *kd*.


¹⁰¹ After *smn·n n·f* we badly miss an object of its own. There is surely no room for one at the beginning of l. 18, where the restoration [*s*]*ip·n* seems inevitable.

¹⁰² *Hkrw Rr*, see *Wb.* III, 401, 18, where, however, this excellent example is overlooked.

¹⁰³ For the future construction here see above, n. *u*.

¹⁰⁴ The place-names which my translation gives in their Egyptian form are those of Karnak (Thebes), Heliopolis, and Memphis respectively. From this time onward these cities are frequently mentioned in parallel as the three capitals of Egypt, see particularly the great Harris and Wilbour papyri; also (e.g.) *Inscr. dedic.* 75.

¹⁰⁵ Doubtless emend  the *šdm·f* form being required as in *ntf irr·f* earlier in the line. For *šps* with the gemination as a transitive verb see *JEA* 38, pl. 8, l. 97 and *Inscr. dedic.* 83.

¹⁰⁶ For the distorted shape of  see above, p. 13, n. 2.

¹⁰⁷ The 'headline' mode of narration with the infinitive (*Eg. Gramm.*², § 306, 2) is found again below in l. 22.

¹⁰⁸ If the determinative of *nhm* here is really a tree (above, p. 13, n. 2), this may possibly have been borrowed from the word for 'pomegranate', *Wb.* II, 286, after 2. *Try nhm* is mentioned *Wb.* v, 346, 20, and has an analogy in *try isdd*, *ibid.* 21. Middle Egyptian uses *šsp* in a somewhat similar way, cf. *šsp ksw*, *Sinuhe* B 17-8; *šsp hr*, *Urk.* IV, 893, 16; also *JEA* 33, 25-26.

¹⁰⁹ *M* 'together with', an admirable example of the sense of the preposition discovered by Smither, *JEA* 25, 166 ff. Breasted rendered 'His Majesty sailed down-stream as the image of Harakhte', but *hnty* definitely means a portable statue. See further below, p. 31.

¹¹⁰ *Ntr* as verb, see *Wb.* II, 355, 14, where, however, the comment *vereinzelt* must be interpreted very literally, since this appears to be the only example. Erman's note (see above, p. 13, n. 1) takes *r* in *r rk Rr* as 'more than', but would not an Egyptian have regarded this as an illicit exaggeration?

¹¹¹ Breasted aptly quotes the Biblical 'from Dan to Beersheba'. Analogous expressions in Cairo 34183, l. 6 = Lacau, *Stèles (CCG)*, 226; *Ann. Serv.* 3, 263.

¹¹² Breasted 'in number more than before', but my rendering makes better sense. For *imy-hyt* 'original' see Vogelsang, *Kommentar . . . des Bauern*, 153; also *Urk.* IV, 99, 14, where statues due to Tuthmosis I are said to *smnhw r imt-sn-hyt* 'be made finer than their originals'.

¹¹³ *Gm ws*, see *Wb.* v, 167, 26; *Sitzb. Berlin*, 1912, 912.

¹¹⁴ Breasted '100 images', but the *ε* stands high up, and there is ample room for it beneath it. Probably an oversight on the part of the sculptor.

¹¹⁵ Lit. perhaps 'in all accurate bodies', a strange phrase.

¹¹⁶ 'Precincts' is Breasted's admirable suggestion for the rare word *bikryt* (*Wb.* I, 430, 14); Bohairic *ḥakri* means 'city'.

³¹ Recognition that *ibt* determined with \triangle signifies, not simply 'place', 'region' (*Wb.* 1, 26, 9 ff.), but 'mound', the equivalent of Arabic *kōm*, has come about only gradually; once realized, the secondary meaning 'ruin' follows quite naturally. Brugsch (*Wörterb.* 1676) and Loret (*Rev. ég.* 10, 88) were obviously right in rendering here 'which were in ruins'. See further *JEA* 34, 15 and another strange writing *ZÄS* 69, 28, 9.

³² Surely so, and not as Breasted 'and with the choicest of the army'. The expression is extremely interesting as pointing to Haremhab's *régime* as essentially military.

³³ Here again, as in ll. 11. 17, spoken words are quoted without any introduction.

³⁴ The reference to Heliopolis here and the very abrupt ending are extremely strange, and one has the impression that the inscription has been left unfinished, perhaps for lack of room.

In its style of narration our inscription stands midway between the Eighteenth and Nineteenth Dynasties; less concrete and specific than most memorials of Tuthmosis III¹ and Amenophis II, it nevertheless does not allow definite facts to be as nearly swamped by flowers of diction as in the great Abydene compositions of Sethos I and Ramesses II. But the somewhat unusual character of the Turin text is due mainly to Haremhab's need, he having no royal blood in his veins, of vindicating his claim to the throne. The favour of the gods was the chief prerequisite, and this indeed is the main theme of his *cursus vitae*; but he also (ll. 6-11) dwells upon the confidence that had been reposed in him by the king, doubtless Tutankhamūn, on whose behalf he had ruled over a long period of years—a time, as we learn from l. 7, when the temper of the Palace was not always as cool as it might have been, and needed the wisdom and moderation of a man as astute as himself to steer the ship of state aright. That Haremhab should vaunt his kingly qualities from birth (ll. 2-4) was mere traditional usage, but his claim to have been nursed by Amūn was justified retrospectively by the events of his Coronation; and the fact that he was subsequently recognized as the first legitimate king after Amenophis III² shows that public opinion acquitted him of all taint of Atenism.

It is strange that Haremhab should have attributed to the Horus of Hnēs so active a part in his elevation to the throne. Granted that, as most Egyptologists have supposed, Hnēs was his birthplace and that local patriotism would naturally prompt him to give the utmost credit to the god of his city, it remains probable that Hnēs was never more than a town of second-rate importance, like other towns on the east bank of the Nile. Perhaps the explanation is that the Horus of Hnēs could so easily be equated with the great dynastic god of the same name. This suggestion is favoured by the references to Horus son of Isis in ll. 2. 26; it is possible that Isis herself was worshipped at Hnēs, since Queen Mutnodjme is described as beloved of her (p. 13). The relationship of Haremhab to Horus was, moreover, emphasized by his own name. It seems probable that earlier translators regarded as mere metaphorical hyperbole the statements (ll. 13 foll.) that Horus of Hnēs accompanied Haremhab to Thebes and there introduced the

¹ However, the Coronation inscription of Tuthmosis III (below, p. 22, n. 5) is something of an exception.

² See now S. Sauneron, in *Chronique d'Égypte*, 26 (1951), 46 ff.

future king into the presence of Amūn. Smither's discovery of the meaning 'together with' sometimes possessed by the preposition *m* (above, p. 20, n. 3a) compels us to take a different view. We must now recognize that Haremḥab carried with him to the Southern Capital the statue of his god, here called Harakhti, tended no doubt by the chief priest of Hnēs. The peregrinations of the gods were not confined exclusively to their periodic mutual visits,¹ but might, as here, have some special object in view. The closest analogies to the present case are perhaps the journey of the goddess Nekhbe in the charge of her high-priest Setaw to attend the Jubilee of Ramesses III at Pi-Raḥmesse,² and that of the statue Amūn-of-the-Road as Wenamūn's travelling companion to the Lebanon. Less clear is the reason why, in an inscription of the Second Intermediate Period, the Horus of Nekhen and his mother Isis had to be fetched home from Itjtowē; there possibly the reference was to statues newly made in the workshops of the Capital.³

That Thebes should be the scene of Haremḥab's coronation was but natural at this particular moment of Egyptian history. Nothing could have been more important than to conciliate the priesthood of Amen-Rē. A couple of generations later Ramesses II, who was apparently crowned elsewhere (see below), still thought it desirable to attend the festival of Southern Opē as one of the first acts of his reign.⁴ But even more than a century before the accession of Akhenaten the Theban priesthood was strong enough to choose the king, and the inscription of which Breasted was the first to recognize the importance shows that it was at Thebes that Tuthmosis III was crowned.⁵ The same cannot be claimed for Ḥashepsowē, since the consensus of Egyptological opinion regards her account of her own coronation as fictitious.⁶ Our information about the locality of other coronations is lamentably scanty, but there are indications that Memphis had earlier been, as it was destined to become again later, the orthodox place for this great national celebration. What other interpretation can be set upon the fact that the great Wilbour papyrus has so much to tell about a Memphite land-owning institution called 'Great Seat of Raḥmesse-miamūn in the House of Ptaḥ'?⁷ It is known that Memphis was regarded as the normal place for the *Sed*-festival and that this was in essence only a renewal of the coronation.⁸ In point of fact, Ramesses II (Raḥmesse-miamūn) appears to have been crowned at Heliopolis, if we may trust the interesting block with sculptured reliefs published by Shorter.⁹ Heliopolis might seem to be much the more suitable place, since its god Atum was the king *par excellence*, whereas Ptaḥ, though often accorded the epithet 'King of the Two Lands',¹⁰ is never depicted with the insignia of royalty.¹¹ Perhaps it was the memory of Menes which connected Memphis

¹ On these see Erman, *Religion der Ägypter*, 374 ff.; Vandier, *La religion égyptienne*, 192 ff. For the visit of Mont of Hermonthis to his namesake at Tūd see Davies, *Seven Private Tombs at Kurnah*, 14 ff.

² *ZAS* 48, 47 ff.

³ *JEA* 33, 3 ff.

⁴ *ZAS* 44, 30.

⁵ J. H. Breasted, *A New Chapter in the Life of Thutmose III*, in Sethe, *Untersuchungen*, 11.

⁶ W. F. Edgerton, *The Thutmosid Succession*, 31.

⁷ A. H. Gardiner, *The Wilbour Papyrus*, 11, 13.

⁸ See my notes *ibid.* Also M. Sandman-Holmberg, *The God Ptaḥ*, ch. vii. It is disconcerting that the Jubilee (*Sed*-festival) of Ramesses III was celebrated at Pi-Raḥmesse (above, n. 2 on this page), and equally so that, as Hayes has recently pointed out *JNES* 10, 82 ff., Amenophis III celebrated his at Thebes.

⁹ *JEA* 20, 18.

¹⁰ Sandman-Holmberg, *op. cit.* ch. vi.

¹¹ *Op. cit.* ch. ii.

so closely with the coronation. It might, of course, be conjectured that the ceremonies were performed separately in each of the three great capitals. In the case of Haremhāb, however, this is palpably untrue; were it otherwise, the Memphite stela (below, the Appendix) would not have given the prominence it does to Amūn and the Theban visit, while Ptaḥ is mentioned only towards the end as the recipient of subsequent gifts, and in particular of the great stela itself, this described as the 'Standing-place of the Ruler' (l. 9).¹ Lastly, note that Nektanebes (*Nḥt-nb-f*) was crowned in the temple of Neith in his native city of Sais; this is distinctly stated on the famous Naukratis stela.²

If thus our knowledge of the localization of the coronation is very imperfect and problematic, still more so is our information regarding its date. Much of the difficulty arises from the fact that the same verb *ḥri*, properly signifying 'appear in glory' like the sun, has in connexion with the Pharaoh three distinct possibilities of application: first, in respect of any state appearance of the monarch; secondly, to refer to the day following the death of his predecessor; and thirdly, as in our inscription, to indicate the actual day of coronation, which for obvious reasons can never have been the same as that in the last-mentioned use. Nor does this enumeration take into account the beginning of a co-regency, for which, if we may judge from the oft-quoted words of an inscription at Dēr el-Baḥrī,³ New Year's Day, i.e. the first day of the first month of the Inundation season, was regarded as the most auspicious date. I have to confess that in my article on Regnal Years I have barely, if at all, envisaged the third of the above-mentioned possibilities.⁴ In the review I wrote many years ago of Frazer's famous 'Adonis, Attis, Osiris' I pointed to three different dates in the civil calendar which appeared to be particularly associated with the king's accession (or coronation) or else with its renewal in the *Sed*-festival.⁵ These were the first day of each of the three seasons, and the reason for their special appropriateness was obviously the intimate bond between the kingship of Ancient Egypt and the events of the agricultural year.⁶ But if the coronation was normally tied down to any fixed date in the civil calendar, then it could not have taken place, as Borchardt assumed, always on the day of a full moon;⁷ this follows from the fact that the lunar year and the civil year of 360+5 days are incommensurable. Let us, then, acknowledge that for the present we have no real testimony as to how the date of the Egyptian coronation was determined. Perhaps in the case of Haremhāb the

¹ For *ḥr Hk* here cf. *ḥrw n Nb* discussed by Breasted, op. cit. 16, n. 23.

² ll. 7-8, see *ZAS* 38, 130.

³ *Urk.* IV, 262, 7. 8.

⁴ *JEA* 31, 24.

⁵ *JEA* 2, 122 foll.

⁶ Frankfort, op. cit. 101-4, appears to take a somewhat similar view, though I know of no evidence to support his statement that the purpose of the coronation was 'to re-establish the harmony between nature and society which had been shattered by the death of the previous ruler'. But he and I are in complete agreement in finding an intimate connexion between the conception of Osiris as a king and his embodiment of the generative forces of nature; and in spite of all differences I believe the comparison with Nyakang among the Shilluks to be sound. See his ch. 15.

⁷ Borchardt, *Die Mittel zur zeitlichen Festlegung von Punkten der ägyptischen Geschichte*, 68 foll. The greater part of this intensely learned and ingenious work is completely unintelligible to me, though certain sections, especially those dealing with the priestly and other genealogies of late date, are obviously of great value and importance. In the section here in question I fail to find any solid evidence that even a single Egyptian coronation was celebrated on the day of the full moon.

(𐎗𐎟𐎛𐎛𐎛), who having greeted the young sovereign, *established herself on his forehead*, while the various great gods of the Per-neser (𐎢𐎠) indulged in mighty shouts of joy. The *crux* here is to determine the factual meaning to be attached to the term 𐎢𐎠 'the King's House'. It was there that Amūn placed the crown on Haremhāb's head, though in the sentence where this is narrated (l. 17) the synonym 𐎢𐎠𐎛𐎛𐎛 'Palace' is employed. That the two terms are synonymous is clear from the fact that it was from 'the King's House' that Amūn issued forth (ll. 19-20) when the religious ceremonies were at an end, and when it remained only for the common folk assembled outside to acclaim their new sovereign. Now it is clear that a temple, not the dwelling-place of an earthly king, was the scene of the actual coronation. Was it the temple of Karnak or the temple of Luxor? The probabilities point to the temple of Luxor. The purpose of the festival of Phaōphi was to conduct Amen-Rē, (who be it remembered was 'King of the Gods'), to his Southern Hārīm (𐎢𐎠𐎛𐎛𐎛 *Ḥp̄st-rst*), which would naturally be a part of his 'King's House' or 'Palace'. If so, we must think of Haremhāb as having participated in the great southward procession from Karnak to Luxor, where, in the following days, the specific coronation rites will have been performed. The Berlin dictionary quotes no other case of 𐎢𐎠 *pr-nsw* to designate a temple, but instances of 𐎢𐎠𐎛𐎛𐎛 'Palace' so used are quoted from various sources.¹

Two other temple-rooms are mentioned in the same passage, namely the Per-wēr and the Per-neser. These were properly the names of the very ancient national sanctuaries at Hieraconpolis in Upper Egypt and at Buto in the Delta respectively.² But it is obvious that no actual visits to those distant sites can have formed part of the coronation celebrations, and that their names here refer to specific chambers in the Theban temple. The Berlin Dictionary gives references only to the temple of Dendera for such a use, and these references are only of Graeco-Roman date.³ But in point of fact, as we shall see, there is excellent evidence from much earlier times.⁴ It was in the Per-wēr that the already mentioned purifications took place.⁵ It was in the same temple room that the king received the uraeus or cobra, which, worn upon his brow, was the most conspicuous symbol of his dread power. The uraeus must perforce have been attached to his forehead by a human agent, whether a priest or a priestess. The lively, but unco-ordinated, fancy of the Egyptians represented this episode of the coronation in various ways. In our inscription it is Great-of-Magic, i.e. the cobra-goddess Edjō, who herself performs the act. In certain temple-reliefs,⁶ these also mentioning the Per-wēr, Great-of-Magic is shown lioness-headed standing or kneeling before Amūn and there

¹ *Wb.* II, 214, 18. 19. Specially good examples are a dedication in Sethos I's temple at Abydos (Mariette, *Abydos*, I, pl. 14, a, b and a reference in the Nauri decree, *JEA* 13, pl. 40, l. 8; even better, Harris, 4, 11.

² For references see my *Eg. Gramm.*² Sign-list, under O19 and O20 respectively.

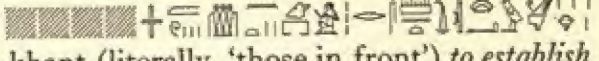
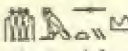
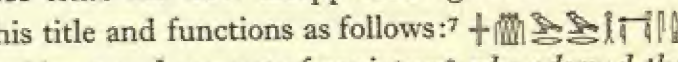
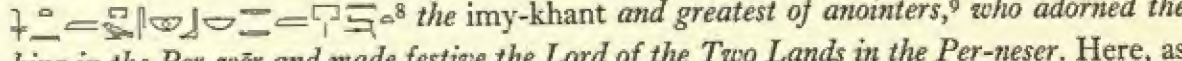
³ For *Pr-wr* see *Wb.* II, 517, 5 and for *Pr-nsw* *ibid.* 518, 2.

⁴ Apart from the references given in the next two notes see others on pp. 26 ff. below.

⁵ *Urk.* IV, 262, 10; *Ann. Serv.* 51, 176; also the block now at Bath depicting the coronation of Ramesses II, see above, p. 24, n. 4. A Per-wēr is mentioned also as existing in the Abydos temple of Sethos I, Mariette, *Abydos*, I, pl. 14, a, b. See now further Labib Habachi in *JNES* 11, 253.

⁶ Naville, *Deir el Bahari*, [IV], pl. 101; at Karnak, *Leps., Denkm.* III, 15; at Speos Artemidos, where Great-of-Magic is equated with Pakhē, Champollion, *Not. descr.* II, 328-9 = *JEA* 33, pl. 3. The legends also *Urk.* IV, 285-6.

it is he to whom the action is ascribed.¹ The gods of the Per-neser, in our text named as applauding the gift, were not improbably impersonated in the ceremonies by priestly bystanders.

It is Amūn too to whom our inscription attributes the placing of Haremhab's crown upon his head (l. 17); at Heliopolis under Ramesses II Atum was of course the divine officiant. In the latter case we are lucky enough to be told the title of the human agents who served as proxies for the god. When Ramesses II relates how Sethos I associated him with himself as co-regent he writes:²  [He caused to be summoned] the imyu-khant (literally, 'those in front') to establish the crowns upon my forehead, and there is other important testimony proving the close association of the same ancient title³ with the making and the ceremonial adjusting of the royal crowns. Thus on a well-known stela of the reign of Ammenemes II⁴ the  imy-khant Semti tells concerning himself: *There was conferred upon me in their (the courtiers') presence the office of imy-khant and of Over-the-mysteries (hry n šti), prophet of Her-of-Upper Egypt (ḥꜥ ḥꜥ) and Her-of-Lower-Egypt (ḥꜥ ḥꜥ), the Khnum⁵ servant of ornamenting the king, who created Great-of-Magic (ḥꜥ ḥꜥ) and lifted up the White Crown in the Per-wēr (ḥꜥ ḥꜥ), chief Nekhebite and servant of the Net-crown in the Per-nut⁶ (ḥꜥ ḥꜥ)....., one whose coming is awaited as Adorner with the Crown in making to appear in glory Horus, lord of the Palace (ḥꜥ ḥꜥ).* This strange passage, impossible to render in anything like respectable English, leaves no doubt as to the importance of the imy-khant in connexion with the coronation, though his presence may have been required also at any of the king's official appearances, for which the same verb *šrt* would naturally be employed. In the Eighteenth Dynasty a certain Amenhotpe, whose tomb has now disappeared again beneath the sands of Kurnah, concisely records his title and functions as follows:⁷   the imy-khant and greatest of anointers,⁸ who adorned the king in the Per-wēr and made festive the Lord of the Two Lands in the Per-neser. Here, as also on the London stela, the two principal national sanctuaries are mentioned, making it probable that at every coronation two separate rooms were either theoretically or

¹ Cf. the words *He established his Beneficent one (šht-f) on his head* on the great stela of Amenophis II from the neighbourhood of the Sphinx, *Ann. Serv.* 37, pl. 2, l. 3.

² *Inscription dédicatoire*, 46.


³ *Wb.* 1, 75, 1 quotes a number of examples, but except in the case cited in n. 2 above, not the most important. Needless to say, the functionary in question had wider duties than those here alone mentioned.

⁴ *Brit. Mus.* 574, published *Hieroglyphic Texts*, II, pls. 8, 9; also in Sethe, *Lesestücke*, p. 75, with the commentary, *ibid.* p. 113.

⁵ Metaphor for 'creator', 'fabricator'.

⁶ This was an alternative name of the Per-neser, see *Eg. Gramm.*², Sign-list, under O20.

⁷ Loret, *Le tombeau de l'Am-Xent Amen-hotep* (in *Mem. Miss. Arch. Fr.* 1881-1884), 27; also Piehl, *Inscr. hiér.* i, 107.

⁸ Perhaps a mistake in the original for .

⁹ Anointing is known to have accompanied the conferring of rank upon officials, see the epithet *wrh iswt* on the stela Florence 1774 quoted by Spiegelberg, *Rec. Trav.* 28, 184, where, however, the sense 'anoint' is wrongly attributed to the stem *nd*. Whether anointing played any part in the coronation ceremonies is apparently not known from other sources.

actually utilized. It is noticeable that in the temple-scenes the *imy-khant* is never depicted as the officiant. The officiant there seen is a figure wearing the side-lock of youth, whose leopard-skin identifies him with the 𓅓 *sétem*-priest,¹ and whose designation 𓅓 *In-mūtef*² 'Pillar-of-His-Mother' shows him to have been a personification of Horus, the support of the widowed Isis. What is the relation of the *In-mūtef* to the *Imy-khant*? I should guess that the latter—we have found one plural instance—was a purely secular designation, whereas the former was a religious one. But this is one of the many problems concerning the coronation that must be left to others to investigate.

Haremhāb makes no allusion to any other crown than that known to the Egyptians as 𓆎 *Kheprēsh* and to Egyptologists generally as the 'Blue Crown'. He does not actually write out the name in full, but uses the hieroglyphic form as an ideogram (l. 20) and also as determinative of the generic word 𓆎 *hrw* 'crown' (l. 17). But there were a number of different crowns and equivalents of crowns; two lines here translated, with the relevant determinatives wherever possible, are taken from the great stela of Amenophis II found near the Sphinx,³ and may be regarded as the *locus classicus* on the subject:

He assumed the Two-Great-of-Magics (𓆎); the Two-Powerful-Ones (*Shmty* 𓆎 Gk. $\phi\chi\epsilon\upsilon\tau$) fraternized on his head; the Atefu-crown (𓆎) of Rē on his forehead; his face adorned with Her-of-Upper-Egypt (𓆎) and Her-of-Lower-Egypt (𓆎); he took possession of the Fillet (*ssd* 𓆎),⁴ the Kheprēsh (𓆎), the Ibes (𓆎)⁵ and the Two-Great-Feathers (𓆎) on his head; the Nemes-headress (𓆎) embraced his shoulders; the crowns (*hrw*) of Atum assembled and were allotted to his image (*hnty*) according to the command of the Maker of the Gods, [Amūn] Him-belonging-to-the-Antiquity-of-the-Two-Lands, (even) him who caused him to appear in glory.

Are we to suppose that at every coronation, including that of Haremhāb, a separate rite combining the manual act with its own appropriate recitation, was devoted to each of these regalia? It seems far more likely that in the New Kingdom the Kheprēsh, the Blue Crown, simply took the place of the more cumbrous headgear of the earliest Dynasties; there may well have been a fashion in crowns as well as in other details of the King's apparel. Admirable articles by Steindorff⁶ and Schäfer⁷ have dealt exhaustively with the Blue Crown in all its aspects. If it is difficult to accept Steindorff's surmise that this was really an ancient constituent of the royal wardrobe, we must

¹ See my *Onomastica*, 1, no. 120, of On. Am., where the reading *stm* rather than *sm* is maintained, and where the connexions both with Ptah and with ceremonial toilette are demonstrated.

² Actually in the coronation ceremonies, Naville, op. cit. pl. 63 = *Urk.* iv, 262; *JEA* 20, pl. 3; announcing his accession to the principal gods, Mar. *Abyd.* 1, 34; to Dedun at the coronation, Leps., *Denkm.* III, 5 = *Urk.* iv, 199. Actually as a god, *Rec. trav.* 17, 119; Tuthmosis III in the role of *In-mūtef*, *Urk.* iv, 157. Other miscellaneous references, *Pyr.* 1593; 1603; Capart in *ZAS* 41, 88 f.; Breasted in *A New Chapter* (above, p. 22, n. 5), p. 12, n. 9 a. The term *in-mwt-f* is hardly ever used as a permanent priestly title, chiefly only as the name of a temporary role or function; the sole clear exception known to me is that of the prince Kha'emwēse, see Gauthier, *Livre des rois*, III, 85, c; 87, Q; 88, B. See further the Postscript below, p. 31.

³ Reference for this see p. 19, n. *hh* and p. 26, n. 1.

⁴ For examples of *ssd* see Moret., op. cit. 89, n. 1.

⁵ The word *ibs* is, according to *Wb.* I, 64, 18, known only from Graeco-Roman texts, where it has a determinative resembling the *nemes*-headress. The *Belegstellen* *ibid.* add an instance from the reign of Hshepsowe, which again does not countenance the determinative given on the stela of Amenophis II.

⁶ *ZAS* 53, 59 ff.

⁷ *ZAS* 70, 13 ff.

nevertheless not ignore Schäfer's reminder of a unique representation, apparently of Dyn. XI,¹ anterior to that next known from the reign of King Kamosē.

The last item of the coronation ceremonial to be mentioned by Haremhab is the formulation and conferring of the royal names and titulary. The inscription recording the coronation of Tuthmosis III² here provides a close parallel. Doubtless the exact wording had been chosen, as in the case of our own Queen's titles, long before the great final occasion. We know the name of the eminent scribe who elaborated the titulary of Ramesses II and arranged for its carving in the Ramesseum on the west of Thebes; this Simūt was certainly a Scribe of the House of Life (𓂏𓅓) like a son and two grandsons of his.³ From Haremhab's account (ll. 19-20), coupled with an explicit statement in an inscription of Hashepsowē,⁴ it seems likely that the five names constituting the 'Great Name' (𓂏𓅓𓂏𓅓) were proclaimed aloud before the celebrations came to an end.⁵ I have already suggested⁶ that there may have been some rite connected with the sacred tree at Heliopolis, an episode which, if it occurred at all, may have immediately preceded the actual coronation.⁷

Our inscription is rounded off in ll. 22-26 with the boast that Haremhab had amply justified his choice as king by renovating the temples of the gods throughout the entire length and breadth of the land, by equipping them with priests, fields, and cattle, and by ensuring the punctual and regular observance of their services and their offerings.

APPENDIX. THE MEMPHIS STELA

For this see above, p. 14. Details have been deliberately postponed in the hope that it might become possible to improve upon the facsimile given in Petrie's volume. Unhappily the search which T. G. H. James undertook for me both on the site and in the Cairo Museum has proved unsuccessful, so that it is necessary to make shift with the two publications at our disposal. Any deviations of importance obtainable from Daressy's article will be mentioned in the footnotes.

In order to display clearly the resemblances and the differences between the Memphis text (M) and that of the Turin statue (T), the translation of what remains of the former is printed on the left, that of the latter on the right, while the few sentences common to both are printed in small capitals and given a place in the middle.

¹ Naville, *XIth Dynasty Temple at Deir el-Bahari*, II, pl. 9. E, first pointed out by G. Evers.

² *Urk.* IV, 160, 10 ff. = Breasted, *A New Chapter*, pp. 9. 19 ff.

³ *JEA* 24, 161, under nos. 9. 10.

⁴ *Urk.* IV, 260-1.

⁵ They were then dispatched by decree to various parts of the country, see *Urk.* IV. 80-81.

⁶ Above, p. 18, n. *dd.*

⁷ In abbreviated form, with Thoth as the performer, in the fine series of reliefs at Karnak depicting the coronation of Sethos I, Leps., *Denkm.* III, 124, *d* = Moret, *op. cit.* pl. 2.

.....(2)
 resting in¹ his Mansion of Southern
 Opč, his Ennead accompanying him.
 The earth grew light, a second day
 came².....
³

(*Speech of Amūn*)

(3) Thou art my son, the heir who came
 forth from my flesh. (So long as) I shall
 be, thou shalt be, thou shalt not be far⁴
 (4) double their⁵
 offerings, they recognizing thee as my
 son who came forth from my flesh, and
 they uniting to give thee [the king-
 ship?].....

(M 5) THEN DID HE PROCEED TO THE
 KING'S HOUSE (WHEN) HE HAD PLACED
 HIM BEFORE HIMSELF TO THE PER-WĒR
 OF HIS NOBLE DAUGHTER THE GREAT-OF-
 MA[GIC]

.....
⁶

.....
 (M 6) Amūn.

(*Speech of the gods*) of Amūn.

'BEHOLD, AMŪN IS COME, HIS SON IN
 FRONT OF HIM, TO THE PALACE IN ORDER
 TO ESTABLISH HIS CROWN UPON HIS HEAD
 AND IN ORDER TO PROLONG HIS PERIOD

..... (14) [Amūn]
 [arisen] in his beautiful festival
 in Southern Opč.

Then did the Majesty of this god see
 Horus, lord of Hnēs, his son with him
 in the King's Induction in order to
 give to him his office and his throne.
 And lo, Amen-Rē^c joined in the jubila-
 tion when he had seen (15)
 on the day of making his submission.

Thereupon he betook himself to this
 noble, the Hereditary Prince, Chieftain
 over the Two Lands, Haremhab.

(16) [her arms] in welcoming attitude,
 and she embraced his beauty and
 established herself on his forehead,
 and the Divine Ennead, the lords of
 Per-neser, were in exultation at his
 glorious arising, Nekhbe, Edjō, Neith,
 Isis, Nephthys, Horus, Seth, and the
 complete Ennead that presides over the
 Great Seat (17) [and they raised?]
 thankful clamour to the height of
 heaven, rejoicing at the good pleasure

¹ *hṯp m*, P(etrie); omitted by D(aressy).

² It is impossible to estimate the original length of the lines in M, but the loss must be very considerable.

⁴ *nn hr-k*, D.

⁵ the gods.

² *sn-ntw* [*n* [*h*] *rw* [*hṯp*] *r*].

⁶ M doubtless much shorter than T.

[like to himself]

.

like to himself. We have gathered together that we may establish for him (18) [and as]sign to him the insignia of Rē^c and may pay honour to Amūn on his account. Thou hast brought us our saviour. Give him the jubilees of Rē^c and the years of Horus as king.

[HE IS ONE WHO] (M 7) WILL DO WHAT
THY HEART PLEASES

and will repress wrongdoing, and destroy falsehood in the land, his laws flourishing in presenting Truth² in front of
.¹

in Ipet-esut and likewise (in) On and Hikuptah. He is one who will enrich them.³

[T 19]³ THERE WAS MADE THE GREAT
NAME OF THIS GOOD GOD AND HIS TITULARY LIKE [THE MAJESTY OF Rē^c, NAMELY]

Horus 'Strong Bull, ready of plans'; etc. etc.

Going forth (20) from the King's House by the Majesty of this noble god, Amūn King of the Gods, his son in front of him, and he embraced his beauty,

[M 8] HE BEING ARISEN IN THE KHEPRESH-CROWN, IN ORDER TO HAND OVER TO HIM THAT WHICH THE SUN'S DISK ENCIRCLES,

and all lands together⁴

the Nine Bows being under his feet, heaven in festival and earth full of joy, etc. etc.

Here the *verbatim* resemblances between the two inscriptions come to an end, though some similarity of intention is discernible in the concluding lines of both. But whereas the Turin text dwells upon Haremhab's services to the gods without specifying any one god in particular, the four remaining lines of the Memphite stela are concerned only with his benefactions in favour of Ptah. Probably the signs were much effaced at this point, since the two copies vary considerably. The following rendering merely indicates the general sense.

(M 9) He made as his memorial to his father Ptah South-of-His-Wall the making for him of a Standing-place of the Ruler⁵ in red sandstone in front of the [northern?] aisle⁶ (?) of

¹ T 19 follows immediately, with its account, in common with M 8, of the giving of the royal names and titulary.

² Cf. T 8.

³ This follows only later in M, see the next note.

⁴ Here follow in M the sentences recording the giving of the name and titulary.

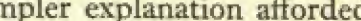
⁵ See above p. 23, top.

⁶ Can *idrt* here be an exceptional writing for *itrt*?

..... [the doors?] (10) to them of real cedar in order to consecrate the house of him who gave him birth, and for the love of purifying the path trodden by his father Ptaḥ. He built for him a Mansion afresh (11) of every noble stone,¹ its flagposts of real cedar, wrought with copper of Asia, their tops of gold, there being made for it a festival-hall (12) apart² from himself (?). He desired to be distinguished above the kings who had been. One does for the doer (?), one responds with good like

The elements common to the two inscriptions raise problems of composition that the means at our disposal do not permit us to resolve. That both derived from the same archetype is clear, and it will hardly be questioned that Haremhab was the dedicator in both cases. For ourselves the important point is the confirmation that Haremhab's coronation took place at Thebes during the annual festival of Phaōphi.

POSTSCRIPT

A close parallel to the sentence *net in hm-f m hd m hnty* (l. 22) treated in n. 3 a on p. 20 is found in *P. Brit. Mus.* 10052, 7, 5, where we read  *He went downstream with the august Staff (of Amūn). Peet, Tomb-Robberies, Text, p. 149, rendered m mdw špsy as in the 'Noble Staff', taking p: mdw špsy to be the name of the river-boat in which that sacred emblem was carried; but although he managed to show in Bull. Inst. fr. 30, 483-4, that the Staff of Amūn was carried in a ship of its own, the hypothesis that p: mdw špsy could serve as the name of that ship remains unproven and must clearly give way to the simpler explanation afforded by Smither's discovery. Reference to Smither's article will show how often m in the sense 'together with' follows verbs of motion, both hdi and hnti being among their number.*

In the note on 'In-mūtef p. 27, n. 2, I have overlooked my own *Onomastica*, II, 44*, under *On. Am.* 355 c, where the god Ḥar-'Inmūtef is mentioned as localized at a place not far from Sōhāg. So too in the Medīnet Habu list of the reign of Ramesses VI published by Nims, *JEA* 38, 37, under E 107, with p. 42.

¹ D est nō šps.


² D *hr* (det.) *hrt* (○); P appears to have *hr:f* as second word.

EGYPTIAN MILITARY ORGANIZATION

By R. O. FAULKNER

No student of the campaigns fought by the armies of Ancient Egypt can avoid making some inquiry into the manner in which those armies were organized and led, and just as Egyptian military activities beyond the natural frontiers of the home-land increase as we pass from the early days of the Old Kingdom to the climax of the Empire, so does the organization of the army show a crescendo of development parallel with the growing amount of use to which that army was put. The purpose of this paper is to give a tentative account of its organization as it existed during the three great historical phases of the Old and Middle Kingdoms and the Empire, in so far as the material now surviving enables us to reconstruct it.

The Old Kingdom

Regarding the organization of the army during the Old Kingdom there is not a great deal of evidence, and the main source of our information is that part of the biography of Weni which deals with the force levied for his Asiatic campaigns.¹ From this we learn that when a major war impended, local officials and notables throughout the land were called upon to embody and command a quota of troops from those under their authority, while the contingents of Nubian auxiliaries allotted to foreign service were presumably led by the caravan-leaders mentioned by Weni. The fully mobilized army therefore included a great many local corps of the nature of a militia, the members of which will presumably have done military service or have had a certain amount of military training, even though but few will have had any actual experience of warfare. We are not told if the army so mobilized was split up into 'divisions' after the manner which prevailed during the Empire; but in a force which consisted, as Weni tells us, of '*many tens of thousands*', practical considerations render it probable that some such organization existed; however, the only army unit mentioned in Old Kingdom texts is the  'battalion',² the size of which is unknown, if indeed it was a unit in the strict sense of the word, and not merely a general term for any considerable body of men. It can also be used of the companies of the enemy.³ The militia system in vogue during the Old Kingdom had the disadvantage, however, that it put military power into the hands of local magnates, and thus paved the way for the anarchy of the First Intermediate Period, when the nomarchs who possessed private armies were able to defy the authority of the Crown.

It is usually assumed that there was no standing army during the Old Kingdom, and it is true that there is no direct evidence of its existence, but it is difficult to believe that there was nothing of the sort; the paucity of the surviving material in comparison with

¹ *Urk.* 1, 101 f.

² *Ibid.* 102, 7; 104, 8; *JEA* 13, 75.

³ *Urk.* 1, 104, 1.

what must once have existed makes the argument *ex silentio* dangerous. If there were indeed a standing army, it may well have been quite small, but it is hard to see how the kings could have dispensed with it altogether. It is inherently improbable that as a means of coping with a sudden emergency, whether invasion or rebellion, the Egyptian rulers were content to rely solely on the local militia, which, owing to the disproportionate length of the country, would require a considerable time to mobilize, and which in time of rebellion might be disaffected; it is much more likely that they maintained a small force of trained soldiers—ultimately reinforced with Nubian auxiliaries—upon which they could call for immediate action. The Nubians in particular would be indifferent to Egyptian political disputes, and would be of unquestioned loyalty if controlled by a strong hand. But if Nubian troops were thus employed by the earlier Pharaohs, as indeed seems to be the case, that very fact suggests that a small native Egyptian standing army as well must have existed as a check against possible disorder or mutiny on the part of the auxiliaries; the fact that the sage Ipuwēr, describing the troubles which followed the collapse of the Old Kingdom, refers to the disorderly conduct of Nubian troops¹ is evidence both of their presence within Egypt and of the consequences of the lack of a strong controlling hand. The scenes of battle at Deshasheh² and Saqqārah³ give the impression of well-trained and competent Egyptian troops, and indeed the task of carrying a fortified place by assault is not one to be entrusted to conscripts taken straight from their fields and trades without a leavening of disciplined soldiers to lead the way in the forefront of the battle. The fact that Weni makes no mention of a standing army does not necessarily imply that there was no such force. He is simply concerned to point out that all available sources of men throughout Egypt were called upon for service, and he may well have taken the small permanent nucleus of troops for granted as having to serve in any case, if it is not included in one of the items he does mention, and, as hinted above, it would be strange if such a heterogeneous force as he describes were not stiffened by a backbone of regular troops.

The only rank of regular officer—as distinct from officials concerned with military supplies and administration—mentioned in Old Kingdom texts is the ‘army-commander’ or ‘general’ (𓂏𓏏 *imi-r mšr*, lit. ‘overseer of soldiers’). When borne by princes of the blood royal⁴ it was doubtless equivalent to the rank of commander-in-chief, though this particular title (*imi-r mšr wr*) does not appear until later. The supreme command apart, the holders of the rank of ‘general’ performed duties not only of a strictly military nature, but also of a kind which to us seem to appertain rather to the civil administration, for in Egypt the forced labour employed on public works consisted largely of conscript troops under military command, so that on one occasion we find that a general of rank high enough to express his mind vigorously even to the Vizier was in command of the troops employed in the quarries at Turah.⁵ Of the generals known to us from Dynasties I–VII, three commanded expeditions to Sinai,⁶ three led

¹ *Admonitions*, 14, 13–15, 1.

² Petrie, *Deshasheh*, pl. 4.

³ Quibell and Hayter, *Exc. at Saqqara. Teti Pyr., N. Side*, frontispiece.

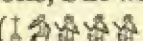



⁴ Gardiner and Peet, *Sinai*, No. 1 (Dyn. I); *Urk.* 1, 181, 2 (Dyn. V); 148, 16 (Dyn. VII?).

⁵ *JEA* 13, 76.

⁶ *Sinai*, Nos. 1, 2, 16.

despite the fact that he conducted several successful campaigns, bears no military title at all, and he seems to have been regarded throughout his career as a civilian official of the Crown, even though in time of emergency he was seconded to a military command.

Of the regular officers of lesser rank the inscriptions of the Old Kingdom tell us nothing; the subordinates named in the lists of mining or quarrying expeditions are ship's captains, government officials, and skilled craftsmen, apart from an occasional caravan-leader.¹ Nevertheless, such officers must have existed, and we get a glimpse of them in the battle-scenes referred to above. The only sign of rank that appears to distinguish the officer from the rank-and-file is a long staff of office. On the Sinai tablet of King Djoser the general carries a staff and an axe (?);² in the battle-scene at Deshashah the officer watching the sappers at work leans on a staff and has a dagger (?) stuck in his belt, while in the corresponding scene at Saqqārah the two officers are unarmed except for their staves. On the Sinai tablet of King Semerkhet (Dyn. I) the king's son and general bears only a bow and a mace, but one hand has been destroyed.³

The methods of recruiting and the conditions of service in the army during the Old Kingdom are topics of which we likewise know very little. From what has already been said, it will be seen that the military forces of Egypt during this period seem to fall into three categories: (1) the hypothetical small standing army, doubtless recruited from the pick of the conscripts, and augmented by Nubian auxiliaries; (2) the local militia, probably with a certain amount of military training, but embodied only in an emergency, under the command of local notables; and (3) the bulk of the levies called up under some system of national conscription, who doubtless also received a measure of military training and who may perhaps have provided the garrisons for the frontier fortresses, but whose principal task it was to furnish the labour for public works. The members of the standing army, if indeed such existed, may have served with the colours for a longer period than the ordinary conscripts, and there may even have been professional soldiers among them. The local militia probably consisted of conscripts who had completed their term of compulsory service and had returned to their normal occupations, but with a liability to be called up in an emergency. The third class, called 'recruits' ( *nfrw*), was almost certainly raised by some form of conscription, but for the Old Kingdom we know nothing of the methods employed, nor do we know how long they had to serve. During their actual term of service they were fed and clothed by the State, but it is not likely that they received any form of pay. The officer in charge of the whole body of recruits was the already mentioned 'general of recruits' (*imi-r mšc nfrw*). We know also of certain 'controllers' who were concerned with these conscripts, to wit the  *hrp nfr(w)* 'controller of recruits'⁴ and the  *hrp pr(w) nfr(w)* 'controller of gangs and recruits',⁵ and the fact that both titles occur in lists of the personnel of Sinai expeditions points to their being the foremen or gangers who had charge of the actual mining operations, ranking as overseers of labour rather than as military officers. The  *imi-r id(w) hnw nfr(w)* 'overseer of Palace youths

¹ See above, p. 34, n. 9.

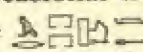
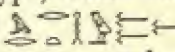
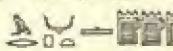
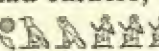

² *Sinai*, No. 2.

³ *Ibid.* No. 1.

⁴ *Ibid.* No. 16.

⁵ *Ibid.* No. 17.

and recruits' may have had charge of the young men picked for service as pages in the Palace or as recruits for the Household troops;¹ to the latter fell the duty of bearing in the royal processions the litters of those nobles to whom the king allowed the privilege of being carried in his wake instead of having to walk.²




Of the other aspects of Egyptian military administration during the Old Kingdom the inscriptions likewise tell us but very little. From an occasional title, however, we learn that the Ordnance Department was controlled by the  *imi-r prwi* *chꜣrw* 'overseer of the two arsenals'³ of Upper and Lower Egypt, while the supervision of the fortifications of the country was in the hands of the  *imi-r rthw zmw* *mnnw nšwt* 'overseer of desert blockhouses and royal fortresses', who had the alternative title  *imi-r wpt mnnw* 'overseer of the affairs of the fortresses'.⁴ The royal fortresses doubtless guarded the principal lines of advance into Egypt, and would be situated mostly along the vulnerable flanks of the Delta and at the Nubian frontier, while the desert blockhouses may have covered the lesser wādis leading from the desert into the Nile Valley as a protection against incursions by nomad raiders, and may also have stood guard over the more remote quarries and mines.  *hꜣmw*, a word which occurs only once,⁵ may perhaps be a general term for 'troops'. The 'retainers' (*šmšw*), of whom we shall have occasion to speak again, do not yet bear arms,⁶ and the same remark applies to their 'controller' (*hrp šmšw*),⁷ so we may justly assume that they have not yet acquired the military character which later was theirs. An obscure function  is recorded by Vandier, *Mo'alla*, 19.

The Middle Kingdom

By the beginning of the Middle Kingdom some of the details of the picture had changed. During the preceding period of chaos the nomarchs had become virtually independent, and enough of that independence remained even under the strong kings of the Twelfth Dynasty for their status to closely resemble that of the great feudal barons of medieval Europe. At least the more important nomarchs, such as those whose tombs are still to be seen at Beni Hasan and El-Bershah, still maintained private armies, and at Beni Hasan we find the nomarch Amenemhēt describing himself as the 'generalissimo' (*imy-r mšꜣ wr*) of the Oryx nome,⁸ a title which implies that he had ordinary 'generals' under him, and indicates that the nomarch's armed forces were organized as a copy on a smaller scale of the national levy, just as the other departments of state had their counterparts in the nome administrations; this is confirmed by the fact that the nomarchs as well as the Pharaohs maintained a *corps d'élite* known as 'retainers'

¹ *Urk.* I, 229.

² *Ibid.* 231. Junker, *Giza*, v, 159 f.; ix, 196 f., is inclined to regard the entire class of O.K. *nfrw* as 'cadets' or 'junior officers', though he admits that *nfrw* later means simply 'recruits'; however, the fact that at Sinai the *nfrw* are on a level with the *prw* 'gangs' and under the same foremen speaks strongly against his contention. The only *nfrw* who, so far as I can see, could be classed as 'cadets' would be those whose rank was such that they could be enrolled in the royal entourage.

³ *Op. cit.* II, 162; III, 9. Varr. of this title are , , and , *op. cit.* vi, 211.

⁴ *Op. cit.* III, 172.

⁵ *Urk.* I, 149, 1.

⁶ Junker, *Giza*, III, 179; Steindorff, *Ti*, pl. 115.

⁷ Blackman, *Meir*, iv, 8.

⁸ Newberry, *Beni Hasan*, 1, 8.

(*šmsw*), a body of men to which we shall refer again. These private armies were without question a legacy from the previous anarchy, when each petty ruler did what was right in his own eyes; the early kings of the Twelfth Dynasty had sufficient power to suppress the privilege of private war, but the armies remained as a source whence at need the Pharaohs could draw supplies of more or less trained men, since it is highly probable that the nomarchs of the Middle Kingdom, again like the barons of the Middle Ages, were under an obligation to the Crown to furnish their quota of soldiers when called upon to do so. Indeed, it is difficult to conceive any other condition upon which powerful subjects were allowed to retain armed forces under their control, but even so, a potential threat to the authority of the Crown remained, and there is reason to think that under Sesostriis III the power of the baronage was broken.¹

Apart from these feudal levies, however, there is clear evidence that the Pharaohs of the Middle Kingdom maintained their own standing army, and indeed it is difficult to see how else in the circumstances it would have been possible to enforce 'the king's peace'. This standing army was recruited by conscription, of which two instances are recorded by Erman and Schäfer.² On one stela³ it is stated that in year 25 of Ammenemes III an army-scribe '*came southward*' (i.e. from the capital at Lisht) '*to choose the recruits (ḥwn nfr) of the Abydos nome of the Southern Province*', while the other, which is a memorial of the king's eldest son Nakhtsebkṛē,⁴ describes him as one '*who gave one man in a hundred males to his lord, the Lord of the Falchion, when he was sent to raise a regiment (s) of soldiers*'. From these inscriptions it is clear that the kings had their own armed forces independently of their nomarchs, though the levy of 1 per cent. of males does not seem excessive. Normally the duty of recruiting will have fallen to the army-scribe, of which the former stela records two; why in the second case it was necessary to enlist the help of the Crown Prince is not clear, unless the new regiment was to be raised from the men employed on his personal estates.

At the head of the national levy stood in the Eleventh Dynasty the 'general of Upper and Lower Egypt' (*imy-r mšr šmꜣw mhꜣw*),⁵ who in the Twelfth Dynasty appears to have changed his title to 'generalissimo' (*imy-r mšr wr*);⁶ we do not know exactly what his duties were, but it is possible that his function was more that of Minister for War rather than that of commander in the field. The officer who actually commanded the army in action—if the Pharaoh were not present in person—was the ordinary 'general' (*imy-r mšr*); one named Nesmontu commanded an expedition to Palestine in the reign of Ammenemes I,⁷ while another named Mentuḥotpe served in Nubia in the reign of Sesostriis I.⁸ The officers responsible for safeguarding the frontiers also received the rank of general; thus we find this title borne by Se'ōnekh, who in the reign of Mentuḥotpe IV was in charge of the forces which supplied the patrols for the eastern desert;⁹ by Sirenpowet, who commanded the frontier patrols at the First Cataract under Ammenemes I;¹⁰ and by Rensoḥb, who was commandant of the fortress of Semnah at the Second Cataract in the reign of Sebkḥotpe II.¹¹ A curious non-military use of

¹ Breasted, *History* (2nd ed.), 189.

² *ZAS* 38, 42 ff.

³ Berlin 1198.

⁴ Cairo 20732.

⁵ Dunham, *Naga ed-Dēr Stelae*, No. 39.

⁶ Cairo 20546.

⁷ Louvre C 1.

⁸ *Proc. SBA* 23, 230 ff.

⁹ Couyat and Montet, *Hammāmât*, No. 1.

¹⁰ *Urk.* vii, 8, 18.

¹¹ *JEA* 3, 188.

The clerical side of the army administration—probably including the quartermaster's department for the issue of stores—was in the hands of the army-scribes (𐎧𐎺𐎠𐎢𐎽𐎢𐎠, *šs n mšr*).⁷ There were large numbers of these military clerks—on a late occasion no fewer than twenty went on a single expedition to the Wādi Hammāmāt⁸—and they doubtless had various grades in rank, from the junior who looked after the affairs of a small detachment to the senior who had charge of the administration of a whole corps; one of the latter describes himself as '*one at the head of all the shock-troops, army-scribe*'.⁹ As we have already seen, the army-scribe was responsible also for the conscription of the young men liable for military service. A title 'Master of the Secrets of the King in the Army' (𐎧𐎺𐎠𐎢𐎽𐎢𐎠𐎧𐎺𐎠𐎢𐎽𐎢𐎠 *hry-šst: n nsu m mšr*) was borne by that Siren-powet¹⁰ who, as already remarked above, was in command of the frontier fortifications at the First Cataract; its exact significance is not clear, but it may mean that he was the military adviser of the Crown as regards the problems of his particular province. The recruits (𐎧𐎺𐎠𐎢𐎽𐎢𐎠 *hwnw nfrw*) had their own commander (*imy-r*); one man entitles himself 'commander of shock-troops, commander of recruits, general',¹¹ a sequence

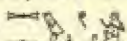
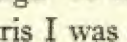
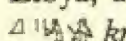
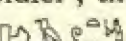
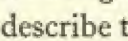
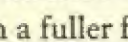
³ *Sebekkhu*, 13 ff.

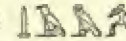
⁷ *P. Kah.* 9, 11; Cairo 20198.

¹⁰ *Urk.* VII, 1, 16.

²¹ Brit. Mus. 1177; see above, p. 38.

which may denote successive landmarks in his career. It would seem from the order of these titles that the commander of recruits was senior to the commander of shock-troops; but since we may suspect that the former was a home-service appointment, it is not improbable that in the field the commander of shock-troops ranked next after the general. The instructorship of retainers was also a promotion open to the commander of shock-troops, if we can trust the instance quoted above, p. 38, n. 6.

There are also a few military titles which are either of general application, not necessarily denoting an exact rank, or whose significance is obscure; thus the  *tsw* 'commander' might be either the leader of an army¹ or the officer in charge of frontier patrols.² Sesostri I was described as the  *hry* 'chief' of the army which he led to Libya, a general term which can be applied to any person in authority.³ The word  *kn* 'valiant man', 'brave'⁴ seems in the Middle Kingdom to be but a choice term for 'soldier', though in the Eighteenth Dynasty the 'Braves' were a *corps d'élite*. The word  *chswty* 'warrior'⁵ may perhaps denote the professional soldier; some colour is lent to this supposition by the facts that (1) on a funerary stela of the Eleventh Dynasty this is the sole title of the deceased and was borne by him at his death;⁶ and (2) at El-Bershah the 'troops of warriors of the Hare nome' (*dmsw n chswtyw n Wnw*) are distinguished from the other troops in the same scene both by the epithet *n chswtyw* and by their dress.⁷ We may suppose that the 'shock-troops' were recruited from the pick of the 'warriors'. In the graffiti of the Heracleopolitan period at Hatnub the sons of the nomarch Nehri describe themselves as  *nds kn* 'valiant citizen (?)',⁸ an expression of which a fuller form  *nds kn n hn dmsw* 'a valiant citizen (?) of the camp (?)' is borne by the nomarch Nehri himself and by a priest of Thoth named Khnemhotpe.⁹ The exact translation of this expression is doubtful, and it is uncertain whether it denotes a military rank or whether it is merely an honorific appellation.

The number of distinct corps in the army of the Middle Kingdom, apart from the special case of the *šmsw*, seems to have been but two, the *dmsw* and the *mnfst*. The ordinary collective term for young 'troops' was  *dmsw*, lit. 'young men', 'rising generation',¹⁰ and from the evidence at El-Bershah it would appear that two kinds of *dmsw* were recognized, the *dmsw n hwnw nfrw* 'troops of recruits'¹¹ and the *dmsw n chswtyw* 'troops of warriors';¹² the latter, as remarked above, wearing a distinctive dress and some of them, perhaps the under-officers, having a feather fixed in their hair. The *mnfst* 'shock-troops' were clearly a distinct corps, and it seems not unreasonable

¹ *Sinuhe*, B 100.

² Gardiner, *Notes on the Story of Sinuhe*, 91.

³ *Sinuhe*, R 13. Note, however, that in Persian times *hry mšr* was a regular military rank, *Hammāmât*, Nos.

14, 134.

⁴ *Beni Hasan*, 1, 8.

⁵ *P. Kah.* 9, 2, 16.

⁶ Dunham, *Naga ed-Dér Stelae*, pl. 5, 1.

⁷ Newberry, *El Bersheh*, 1, 15.

⁸ Hatnub Graff. 16, 2-3; 17, 9; 23, 3; 26, 5.

⁹ *Ibid.* 20, 2-3; 25, 5; 27, 2.

¹⁰ Without qualifying adjunct, *Admonitions*, 14, 14; *P. Kah.* 9, 2: *dmsw n hrdo* 'troops of young men', Hatnub Graff. 16, 4; *dmsw Wist* 'troops of Thebes', Louvre C 1.

¹¹ *El Bersheh*, 1, 14, 3; depicted *ibid.* 15, registers 1, 2, 5, but here described quite briefly as *dmsw* alone.

¹² *Op. cit.* 1, 15. For *chswtyw* employed in Nubian garrisons see *JEA* 31, pl. 4.

to conjecture that the *d̄mw n ḥwnw nfrw* were conscripts who served for a while with the colours and then returned to their ordinary vocations; that, as already suggested, the *d̄mw n ḥrwtjw* were professional soldiers; and that the *mnfst* were likewise professional soldiers, but were more highly trained than the *ḥrwtjw*. A modern analogy is our Brigade of Guards as compared with the ordinary county regiments.

It remains to note a few military terms which have not yet been mentioned. The normal unit of troops was the *ḫt sš* 'company' or 'regiment',¹ the size of which in the Middle Kingdom is not known; the term can be applied also to non-military bodies of men,² and the several *ḫt imy-r sš* mentioned in a Sinai inscription³ were doubtless merely foremen of gangs. The *phrt* were the 'patrols' which watched over the frontiers and kept an eye on whoso entered or left Egypt.⁴ The term *ḫwt* which occurs in the Semnah dispatches⁵ is probably, as Smither suggested, a miswriting of the later word *ḫwt* 'garrison troops', see below, p. 44. The terms *try-pdt*⁶ 'bowman' and *wršy* 'sentry'⁷ explain themselves. In Egypt the police were of a semi-military nature, so that we may include here the *imy-r šncw nb ḥr(y) mw ḥr(y) tš* 'overseer of all police-patrols on water and on land',⁸ who was also a general (*imy-r mšc*) and an 'overseer of all disputes' (*imy-r snṯt nbt*, varr. *imy-r*,⁹ *imy-r*¹⁰); in the last case its bearer is stationed in a Nubian fortress, and may have been the Egyptian equivalent of a Resident Magistrate or District Officer. In the *wrtw* 'of the retainers of the House of Sesostri'¹¹ we meet for the first time with a title which in the Twentieth Dynasty figured prominently in the military hierarchy, but which at this date may have denoted a purely administrative function. The 'wrtw of Nubians' recorded on a stela probably from Aswān¹² and the 'great wrtw of the City' of the stela of Sebkhu were almost certainly civil officials.

The Empire¹³

The rise of the Eighteenth Dynasty brought with it changes in the military sphere which amounted almost to a revolution. During the earlier periods of Egyptian history there was no lack of warlike activity, but it was on a comparatively small scale; under the new dispensation we meet for the first time with a large standing army organized on a national basis and officered throughout with professional soldiers. The reason for this fresh development was that, as a result of the expulsion of the Hyksos from Egypt and the determination of the Pharaohs to render impossible any repetition of the foreign

¹ Cairo 20732.

² *El Bersheh*, 1, 15 (*wrbw*).

³ *Sinai*, No. 85.

⁴ Gardiner, *Notes on the Story of Sinuhe*, 91.

⁵ *JEA* 31, pl. 4, 12; cf. p. 6, n. 1.

⁶ Louvre C 13.

⁷ *Sinuhe*, R 44 = B 18-19.

⁸ Dunham, *Naga ed-Dér Stelae*, p. 35.

⁹ *Op. cit.* 34.

¹⁰ *JEA* 31, pl. 3, 7.

¹¹ Cairo 20019. The current translation 'quartermaster', though indicating the derivation from *wrt* 'quarter', 'district', is misleading, inasmuch as in current parlance the term 'quartermaster' has specialized military and naval meanings which in no way correspond to the function of the Egyptian *wrtw*. It is, in fact, hard to find a good English equivalent.

¹² Berlin 19500, quoted by Habachi, *Ann. Serv.* 50, 506.

¹³ From here on I repeat the paper read before the 21st International Congress of Orientalists in Paris, July 1948.

domination, Egypt developed into a first-class military power with the control of Palestine and Syria as the main feature of her foreign policy. While it is not possible to say precisely at what date the Egyptian army attained to its maximum development, we are probably justified in assuming that the following outline of its organization is in the main correct for the period from Tuthmosis I to the final collapse of the Empire, though it is possible that a material part of the picture is due to the military genius of Tuthmosis III, while some changes seem to have been introduced early in the Twentieth Dynasty.

At the head of the whole military hierarchy stood the Pharaoh, who himself usually took the field as Commander-in-chief in major campaigns, though a minor expedition might be entrusted to a high officer. The function of Minister for War was performed by the Vizier with the assistance of the $\text{𓂏𓂏}—\text{𓂏}$ 'wrtw of the Ruler'¹ and an Army Council (𓂏𓂏𓂏 nt mšr), to whom he gave his orders, but in the field the Pharaoh was advised by a council of war which consisted of senior officers whom he called into consultation on the eve of action. We know of two such meetings; one before the battle of Megiddo, when Tuthmosis III, against the advice of his officers, decided on the dangerous but most direct route of advance by the Pass of 'Aruna;² the other at the outset of the battle of Qadesh, when Ramesses II, unexpectedly finding himself confronted with an enemy whom he believed to be a hundred miles away, hastily summoned his officers and berated them for failing to provide him with accurate intelligence.³ The actual field army was organized in divisions, each of which was in itself a complete army corps consisting of both chariotry and infantry and numbering about 5,000 men;⁴ at Qadesh the divisional commanders were apparently royal princes, though one division was led by the Pharaoh in person. These divisions were named after the principal gods of the realm; on the Bethshan stela describing part of the Asiatic campaign of year 1 of Sethos I we read of the divisions of Amūn, Prē, and Sutekh,⁵ while in the Qadesh campaign of Ramesses II the expeditionary force consisted of the four divisions of Amūn, Prē, Ptaḥ, and Sutekh;⁶ furthermore, on the Bethshan stela the divisions engaged are described as the 'first' divisions of the gods named, which implies the existence of 'second' divisions, probably the troops in reserve upon which the field army depended for reinforcements. In the expedition of Ramesses IV to the Wādi Hammāmāt, in which a full division was employed, the officer in command was 'the chief wrtw (= 𓂏𓂏) of the army', with 20 wrtw under him, each commanding 250 men.⁷ From the enact-

¹ *Urk.* IV, 1112; an obscure title which may just possibly have some military significance. Breasted (*Anc. Rec.* II, § 695) and Davies (*Rekh-mi-rē*, I, p. 92) take this title as referring to the Palace caterer, perhaps by confusion with the title wrtw n ḥt ḥḥt quoted *Wb.* I, 288, 13. Could the wrtw n ḥḥt possibly be the official who had charge of the royal progresses, and who had to apply to the Vizier for the necessary military escorts?

² *Urk.* IV, 649 ff.

³ Kuentz, *Qadeh*, 343 ff.

⁴ Breasted's estimate of the Egyptian army of four divisions at Kadesh as numbering 20,000 men in all (*Anc. Rec.* III, p. 127) is probably not far wide of the mark. The expedition of 5,000 men sent by Ramesses IV to the Wādi Hammāmāt was almost certainly a complete division.

⁵ *JEA* 33, 36 f.

⁶ Kuentz, *Qadeh*, 231 f.

⁷ *Bull. Inst. fr.* 48, 33. The prominence of the wrtw here as compared with earlier records points to an extensive reorganization of the army, doubtless by Setnakhte or Ramesses III after the anarchy which closed Dyn. XIX. Wrtw, like idnw, is a civil title which could be adapted for military use.

ments of Haremhab we learn that at home in Egypt the standing army was divided into two corps, one stationed in Upper Egypt and one in Lower Egypt,¹ and each was under the command of a 'lieutenant-commander' ($\text{𓂏𓏏𓂏} idnw$) of the army',² who presumably was responsible to a 'general' ($imy-r mšr$) acting as Commander-in-chief Home Forces, though in point of fact no such officer is actually named in this connexion; in the instance quoted it is possible that Haremhab, who before his accession to the throne had been 'generalissimo' ($imy-r mšr wr$), kept the command of the army in his own hands. The duties of the troops stationed in Egypt were doubtless those of the home forces in any land, namely to supply the cadres of the foreign-service army, to garrison the frontier forts, to provide the military escorts for royal progresses and public pageants, and to maintain order on occasions of riot or tumult; also, as ever in Ancient Egypt, the conscripted rank and file could be called on for unskilled labour on public works.

The two arms of the service were chariotry and infantry, the former being a new weapon perhaps introduced by the Hyksos. Cavalry was as yet unknown, probably, as Winlock remarks,³ because the contemporary breed of horses was too weak in the back for the hard work of military riding; it is true that in the scenes of the battle of Kadesh we see a few men on horseback,⁴ but these may have been no more than mounted orderlies. In a field action it seems to have been the chariotry who took the first shock of battle, the infantry advancing behind them to exploit a tactical success or to stem the enemy's advance if matters went awry, somewhat as in modern warfare the infantry operate behind a screen of armoured vehicles. The chariotry also charged the enemy at the moment of victory, so as to turn defeat into rout, and it is doubtless this phase that we see in those familiar pictures where Pharaoh charges in his chariot over a carpet of dead and dying. The light two-wheeled, two-horsed chariots of the Egyptians contained two men, a driver ($\text{𓂏𓏏𓂏} ktñ$ or $\text{𓂏𓏏𓂏} kdn$)⁵ and a fighting soldier ($\text{𓂏𓏏𓂏} snn$)⁶ who was armed with bow and arrows, javelins, and a shield, and probably a sword as well; 'the first charioteer of His Majesty', an important personage, was doubtless he who drove the royal chariot. The force was divided into squadrons of 25 chariots each commanded by a 'charioteer of the Residence',⁷ whose senior officer was the 'lieutenant-commander of chariotry' ($\text{𓂏𓏏𓂏} idnw t-nt-ḥtr$);⁸ it was administered by the 'Master of the Horse' ($\text{𓂏𓏏𓂏} imy-r ssmt$),⁹ while the 'stablemasters' ($\text{𓂏𓏏𓂏} ḥry ḥw$)¹⁰ were responsible for the grazing and well-being of the horses. The $\text{𓂏𓏏𓂏} ḥ n shpr$ ¹¹ was doubtless a 'training-stable' for horses and horsemen alike. There was no need of farriers, as the horseshoe had not yet been invented.

The infantry included two main classes of soldiers, both of which had existed already in the Middle Kingdom, namely, the *mnfst* or *mnfy*t and the *nfrw* or, more fully, the

¹ Muller, *Eg. Res.* 1, pl. 93, l. 25.

² Winlock, *The Middle Kingdom in Thebes*, 153.

³ Gardiner, *Onomastica*, 1, 28*.

⁴ Gardiner, *Onomastica*, 1, 28*.

⁵ Helck, 62 ff.; Gardiner, *Wilbour Papyrus*, II, 77 ff.

⁶ Ibid. pl. 92, l. 21. On this title see below, p. 46.

⁷ Kuentz, *Qadeh*, pl. 42, top.

⁸ *Bull. Inst. fr.* 48, 35.

⁹ Op. cit. 1, 27; Helck, *Militärführer*, 59 ff.

¹⁰ Helck, 63.

prisoners-of-war, especially the Sherden, into the Egyptian service;¹ under the Ramesides this practice was developed until these foreign contingents formed an appreciable part of the Egyptian army. It is, indeed, not impossible that in the later period of the Empire many of these foreign troops may have been true mercenaries serving Pharaoh for hire; in the long land-register contained in the Wilbour Papyrus, compiled under Ramesses V, a certain number of the land-holders belong to the alien Sherden race, while others are probably Libyans,² which suggests that they either held land on condition of rendering military service, or else that they were time-expired veterans pensioned off with grants of land. It seems hardly likely that prisoners taken in war would be allowed to hold land of their own on terms of equality with Egyptians.

We have already seen that the infantry force of the Egyptian army consisted of three main groups: recruits, trained men, and shock-troops. These were divided into regiments ($\text{𓂏} \text{𓂏} \text{𓂏}$, *sr*) which in earlier Ramesside times consisted of 200 men,³ and which were commanded by a standard-bearer ($\text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$, *sr*) who, as his name implies, bore the regimental standard on parade and in battle.⁴ The main body of the infantry was recruited by conscription carried out by the 'scribe of recruits' (*sr nfrw*);⁵ under Ramesses III one man in ten of the population was taken for service, temple employees being exempt.⁶ The soldiers thus conscripted were called $\text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$ *nrhw nrw mšr* (later $\text{𓂏} \text{𓂏} \text{𓂏} \text{𓂏}$ *rmšr mšr*)⁸ 'members of the army'; the propaganda against the military life contained in the school 'miscellanies' indicates, however, that it was also possible voluntarily to choose the army as a career, and it is perhaps permissible to conjecture that the word $\text{𓂏} \text{𓂏} \text{𓂏}$ *wšw*, another term for the ordinary soldier,⁹ refers to such volunteers as distinct from the *nrhw nrw mšr* or conscripts; it is significant that the rank of *wšw* was frequently borne by men of some social position, such as 'Aḥmosē of El-Kāb'¹⁰ and Amenemḥab of the 'Braves',¹¹ and that at times, as in the case of 'Aḥmosē, the title could pass from father to son. It seems to have been from the ranks of the *wšw* that the officer corps was recruited.¹²

The lowest grade of officer at present known to us was 'the greatest of 50' ($\text{𓂏} \text{𓂏} \text{𓂏}$ *pj rj 50*).¹³ There is apparently no trace of the existence in the Egyptian army of a centurion or 'commander of a hundred'; the next rank we find is the 'standard-bearer', who commanded a 'regiment' of 200 men.¹⁴ Under Ramesses IV the principal unit consisted of 250 men led by a $\text{𓂏} \text{𓂏} \text{𓂏}$ *wšrtw* 'of the army';¹⁵ in the Wilbour Papyrus, dated in the next reign, standard-bearers are still not uncommon, but it would seem from the foregoing that their status had declined and that they no longer commanded regiments. The five *wšrtw* of the Wilbour Papyrus may not necessarily all have been military men. Next above the regimental commander came the 'captain of a troop' ($\text{𓂏} \text{𓂏} \text{𓂏}$ *ts pḏt*) and the 'commander of a troop' ($\text{𓂏} \text{𓂏}$ *hry pḏt*);¹⁶ wherein their duties lay is not quite clear, but the troop-commander (*hry pḏt*) may perhaps have stood at the head of a

¹ First mentioned in the El-'Amārna Letters, op. cit. I, 194* ff.

² Gardiner, *Wilbour Papyrus*, II, 80 f.

³ Helck, 37.

⁴ *JEA* 27, 12 ff.

⁵ Helck, 15 ff.

⁶ P. Harris I, 57, 8 f.

⁷ *Urk.* IV, 48. 730. 911; Müller, *Eg. Res.*, pl. 93, l. 28.

⁸ *Bull. Inst. fr.* 48, 20.

⁹ Helck, 36.

¹⁰ *Urk.* IV, 2.

¹¹ *Ibid.* 890. 895.







¹² Cf. Helck, 36.

¹³ *Ibid.* 37, n. 1.

¹⁴ *Ibid.* 37.

¹⁵ *Bull. Inst. fr.* 48, 33.

¹⁶ Gardiner, *Onomastica*, I, 112* f.

brigade of several regiments; he could also be the commandant of a fortress, in which case his immediate superior was apparently the 'overseer of garrison troops' ( *imy-r twcrt*),¹ who in his turn came under the authority of the 'overseer of fortresses' ( *imy-r htm*), of whom there was one for the Mediterranean coast and another for the Nubian frontier;² this officer and his deputy (*idnw*) were administrators rather than active soldiers. Yet higher in the military hierarchy was the 'lieutenant-commander'—more fully, 'lieutenant-commander of the army' (*idnw n p; mšr*)³—but those who bore this title seem not to have been of uniform importance; as we have already seen, in the enactments of Haremhab the *idnw* commands an entire army corps, while in the case of Amenemhab of the 'Braves' this rank carried with it no more than the command of the *corps d'élite* of which he was a member. Of the lieutenant-commander of chariotry we have already spoken, while the desert-police (Medjay) also had an officer of this rank.⁴ It may be that this military use of *idnw* (the word is also used of the 'deputies' of civil officials) implies simply that its bearer was a senior officer responsible only to the 'general' (*imy-r mšr*); that he was, in fact, the general's 'lieutenant' or 'deputy' at the head of whatever body of men he happened to command. The general himself was the administrator as well as the military commander of the forces under his authority;⁵ senior to the generals was the 'generalissimo' (*imy-r mšr wr*),⁶ often a royal prince, who was answerable only to the Pharaoh. Apart from the officers already mentioned, however, there were others whose function either did not fall within the scope of ordinary regimental duties or else is not very clear to us today; the former class is represented by the 'herald' ( *whmw*), whose duty it was to make reports to the Pharaoh or other commanding officer, and to pass on orders to subordinates.⁷ From the latter class it will suffice to quote the  *ski*, a fighting officer whose exact position and duties are still obscure.⁸ The administrative side of the army was largely in the hands of various grades of military scribe, among whom we may name the 'army scribe' (*sš mšr*),⁹ 'scribe of the infantry' (*sš mnfyt*),¹⁰ 'scribe of assemblage' ( *sš shw*),¹¹ and 'scribe of distribution' ( *sš dn*);¹² the last two were doubtless concerned respectively with the accumulation and issue of stores.

When a military force takes the field, it requires some form of transport to convey supplies of food, water, spare weapons and the like. In the armies of Ancient Egypt pack-animals in the form of the universal donkey were originally the sole means of transport, though from the Eighteenth Dynasty it is possible that mules may also have been employed.¹³ But when Tuthmosis III brought boats for crossing the Euphrates from Byblos on wheeled ox-carts¹⁴ he instituted an innovation which had come to stay; in the camp of Ramesses II at Kadesh ox-drawn carts are to be seen beside the pack-

¹ Helck, 25, 39, n. 8.

² Op. cit. 1, 25* f.; above, p. 43.

³ Gardiner, *Onomastica*, 1, 91* f.

⁴ Gardiner, *Onomastica*, 1, 25*.

⁵ For the existence of mules in Dyn. XVIII see Nina M. Davies, *Anc. Eg. Paintings*, pl. 68.

⁶ *JEA* 32, 40.

⁷ Ibid. 22 ff.; Gardiner, *Onomastica*, 1, 33*.

⁸ Op. cit. 1, 88*.

⁹ Helck, 27 ff.

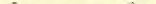
¹⁰ Ibid. 30 f.

¹¹ Op. cit. 1, 92* f.

¹² Helck, 14 f.

¹³ Op. cit. 1, 34*.

¹⁴ Op. cit. 1, 33* f.

animals which were still largely used,¹ and which even to this day are indispensable in certain conditions of warfare, while ox-wagons were employed also by Ramesses IV.² The officer called  *mškb* is usually supposed to be the transport officer, but there is some doubt about this.³

¹ Kuentz, *Qadech*, pls. 34. 39.

² *Bull. Inst. fr.* 48, 26.

³ Gardiner, *Onomastica*, 1, 92*.

THE STATUE HEAD OF A TUTHMOSIDE MONARCH

By CYRIL ALDRED

THE head from a statue of a king illustrated in plate III *a, b* has been recently added to the Egyptian Collection of the Royal Scottish Museum, Edinburgh, where it bears the registration number 1951.346. It measures 4 in. in height and has been most expertly carved in a very hard, dark green basalt, which, however, has not received any high degree of surface finish; there is no evidence to show whether it was originally painted, but the presumption is that it was not, though it is probable that the eyes, diadem, and other details were picked out in colour. Nothing is known of its provenance or previous history except that it was first brought to this country from Egypt in 1949.

The difficulty of identifying the Pharaoh whom this fragment portrays would seem insuperable to those accustomed to regard Egyptian portraiture as greatly stylized, even that produced by a master-craftsman of the Court. Nevertheless, despite the loss of the inscription and other important details, there are features which allow us to date this head to within very narrow limits, though perhaps it would be hazardous to allot it to a particular king. In so doing, we shall be making a comment upon the peculiar quality of Egyptian royal portraiture, which though seldom searchingly realistic yet remains, especially in the smaller and more finished works, often highly individual.

Few students when confronted by this particular specimen would hesitate to place it in the New Kingdom. The bland expression conveyed by the treatment of the unlined face and rather full lips belongs to the mid-Eighteenth Dynasty when a characteristic style, deriving from a return to the inspiration of the late Eleventh and early Twelfth Dynasties, had been achieved. There is no suggestion in the treatment of this head of the divine aloofness of Old Kingdom royal statuary, nor the bitter severity of the later Middle Kingdom style; and the Ramesside conventions are as little in evidence as are the polished surfaces and mannerisms of Saite official portraiture.

Moreover, apart from the expression, such features as the unpierced ears and the placing of the main coils of the uraeus high upon the head, exclude this fragment from the later Eighteenth and early Nineteenth Dynasties. Statues of kings wearing the *khat* wig-cover are comparatively rare, the earliest example known to the writer being a weathered red sandstone statue from Serābiṭ el-Khādim in the Royal Scottish Museum made in honour of King Snefru by a king of the late Twelfth Dynasty.¹ The kneeling red granite statues of Hatshepsut from Dēr el-Baḥrī appear to be the earliest Eighteenth Dynasty examples now extant.² Some of the large sandstone sphinxes from the same site are also represented wearing the *khat* headdress,³ but

¹ Regn. No. 1905.284.2., described in *Top. Bib.* vii, 358, as 'base' only. See *Inscriptions of Sinai*², Pt. 1, pl. 69, 241.

² Metropolitan Museum of Art, *Egyptian Expedition*, 1922-23, figs. 27 and 28.

³ *Op. cit.*, 1930-31, p. 14, fig. 5.



a



b



c. Amenophis II, Cairo 42077

HEAD OF A KING IN THE ROYAL SCOTTISH MUSEUM

perhaps the most notable example, to which we shall return, is the statue of Amenophis II found by Legrain in the Karnak *favissa* and now in Cairo (Cat. No. 42077).¹

The stone from which the head has been carved is unusual, green basalt being a rather rare material for statuary though the Royal Scottish Museum also possesses two late Middle Kingdom votive statues² in green basalt, but fashioned in a very summary style determined by a simple pecking and rubbing technique in no way comparable to the excellent craftsmanship of this particular fragment. Nevertheless, despite the intractable nature of the material, three remarkable statues in green basalt have survived, all made within a few years of each other, namely, the head in the British Museum (No. 986)³ ascribed to Hatshepsut/Tuthmosis III, the pair-statue of Amūn and Tuthmosis III (Cairo, Cat. No. 42066)⁴ and the statue of Amenophis II mentioned above. With these should also be associated the statues of Tuthmosis III in grey basalt (Cairo, Cat. Nos. 42053, 42054)⁵ as being from the same studio. It is probable that one at least of the statues shown in the tomb of Rekhmirē, the group of Tuthmosis III and his queen, was also in this same green or grey stone.⁶ All are characterized by an idealistic heroic conception of the Pharaoh expressed by consummate craftsmanship and meticulous finish.

It is tempting, therefore, to see in our fragment the head of a companion statue to Cairo No. 42077, since not only is the material the same, and the dimensions compare closely, but the physical resemblance is also very strong. One feature only prevents a categorical identification and that is the damaged nose. The more careful portraits of Tuthmosis III such as Cairo No. 42053 and 42054 reveal him as having a broad round face and a prominent arched nose, features which, as his mummy shows, are characteristic of his physiognomy. Hatshepsut in her more intimate portraits (such as New York 29.3.2.), has a nose of similar shape but a rather more oval face and pointed chin. The mummy of Amenophis II displays a slightly more elongated facial structure, the nose being longer and less obtrusive and the jaws narrower than those of his father. Such features appear to have been justly rendered in certain of his statues.⁷ But there also exist other portraits of Amenophis II which reveal a rounder, plumper face, more like his father's but with a straighter nose (see plate III c).⁸ These probably represent the king as he was soon after his appointment as co-regent, 'as a beautiful youth, when he had come of age and completed 18 years' and before the conventions of the Tuthmoside style had been entirely superseded. Whether we regard this fragment as the head from a statue of Tuthmosis III or Amenophis II, therefore, must remain a matter of personal opinion. To the Ancient Egyptian it would be immaterial, since the now missing inscription on the belt-buckle, plinth, or back-pillar would have resolved all doubt.

¹ Legrain, *Statues et Statuettes*, I, pl. 47.

² Regn. Nos. 1952.137 (Ex-Hilton Price Collection, No. 3755) and 1952.158.

³ Hall, *JEA* 13, 133.

⁴ Legrain, *op. cit.*, pl. 39.

⁵ *Ibid.*, pl. 29.

⁶ Metropolitan Museum of Art, *Egyptian Expedition, 1925-26*, p. 12.

⁷ E.g. Cairo, Cat. Nos. 42074, 42075; Copenhagen, *ÆIN*, 1063.

⁸ E.g. Cairo, Cat. No. 42073; Turin, Cat. No. 1375.

GRAFFITO OF THE CHAMBERLAIN AND CONTROLLER OF WORKS ANTEF AT SEHĒL

By L. HABACHI

IN this *Journal*, vol. 37, p. 18, n. 3, we expressed the hope of publishing the graffito at Sehēl reproduced by De Morgan and his assistants in their *Catalogue des Monuments* under No. 76.¹ It contains many points of interest which have not been sufficiently appreciated, owing to the fact that in the facsimile there given, part is omitted and many signs are inaccurately rendered. Like most of the rock inscriptions, whether in Sehēl or in other places in the Aswān district, a comparatively even surface was chosen to receive the inscriptions, which were very lightly engraved.² These are legible only because their colour is different from the rest of the rock, which was left unpolished. Indeed, it is in only a few cases that the inscriptions are clear and can be easily followed; in many instances this is quite difficult or even impossible.

The graffito here published is engraved on a detached block lying at the foot of the hill called Bibitagoug, a few metres to the north of the SW. corner.³ It is found in a place so crowded with inscriptions that there is hardly any rock with a moderately smooth surface which is left uninscribed. There are few graffiti on the island, especially those belonging to private individuals, which are as carefully carved as ours, but as the stone on which it is cut is uneven in some places and has intrusions of light red granite in others, some of the signs proved to be obscure and rather difficult to read. Fortunately the presence in Aswān in recent years of a number of distinguished scholars has afforded opportunities to discuss with them many of the difficulties occurring in this text and in the others of interest in the district. We may mention in particular Sir Alan Gardiner, who visited Aswān the year before last and who was kind enough to spend two days collating with us some of the inscriptions of Sehēl, which we hope to publish in the near future.

The graffito now under discussion consists of two inscriptions referred to below as A and B respectively. The first has but two vertical lines, written in a retrograde direction and with one line very short, while the second consists of one horizontal line over eleven vertical columns written in the normal direction from right to left. The whole graffito occupies a space of 73 cm. in height by about 1 m. in breadth. At the top right-hand corner of Inscription B are two male figures facing each other; that on the left impinges on the frame of Inscription B and underlies part of Inscription A (see fig. 1). The transliteration and translation of the two inscriptions are as follows:

A. (1) *Dw nfrw* (2) *‘nkt in imy-r ḥnwty^b wr hrp kst Intf msc-hrw.*

¹ Vol. I, p. 89.

² Some of the inscriptions have a polished surface, but these are usually cut deeply into the rock and mostly contain important historical texts.

³ For its position see *JEA* 37, pl. 5, fig. 1.

Adoring the beauty of Anukis by the great chamberlain and controller of works Antef, the blessed.

B. (1) °Htp di nsw 'nkt nbt wis h n kī n imy-r ḥnwt^a (2) hrp kst Intf msc-hrw ir n °Sst-Isi.¹ Dd-f: (3) I wcb nb sš nb n r-pr pn ir-t(y)-fy hst (4) ntr-f mr-t(y)-fy mn mnw ntw ntrw imyw ntw-sn (5) ir-t(y)-fy htp-f m it-f swd-t(y)-fy n sī-f sī⁶ (6) tw ht-f^b m-ht twⁱ ib-f htp m cnh nn dwt (7) nbtⁱ kch-t(y)-fy drt-f^k rc n hb mⁱ Stt dm-t(y)-fy^m (8) rn-i ih st



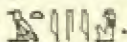

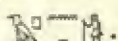


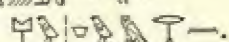



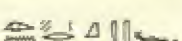


FIG. 1. GRAFFITO No. 76 at SEHĒL

n irr st r irw n-f st n wrd(9)·n-tw hr-sⁿ tw pw m r^o nn bln-i r rmtt (10) vnt 3bw^a ir st msc
rc nb °ib-f hr-tp cnh-tn n-iⁱ hs tn^a hr (11) pn nfr m sh hrw-tn °r nt(y) tp r. Hnms-f^a mr-f n
st-ib-f (12) °hity-^c imy-r hmw-ntr Hkī-ib -cnhⁱ ir n Kt-^cnkt^v šms-f ihwy Sbk-^csⁱ ir n...-cnh.²²

A boon which the King grants to Anukis, Mistress of the Bark of the Hypostyle Hall (?), for the ka of the chamberlain and controller of works Antef the blessed, born of Satisi. He says: O all ye priests and all ye scribes of this temple who shall do what your^a god praises, and who shall desire that the monuments of your local gods endure: he who shall achieve content in his profession^b and shall hand over^c to his son, who takes care of^d his possessions after old age^e when his heart is at rest in life^f without any evil—he it is who shall bend his hands^g on the day of festival in Sehēl, and who shall pronounce my name; it is more beneficial to whoso does it than to him for whom it is

done,^h and none will be weary through it,ⁱ it is but breath of the mouth.^j I have done no wrong to^k the people of Elephantine, and he who does right^l every day is one who is concerned for me (?).^m As ye live for me and as this my kindly countenanceⁿ favours you, be ye not neglectful^o of that which is on my lips. (Dedicated by)^p his well-beloved friend the Count and overseer of prophets Hekaiḥ-ṯonekh born of Ket'anūke, (and by) his retainer the sistrum-player (?)^q Sebko, born of . . . -ṯonekh.

Textual Notes

- ^{a-b} Engraved over the left-hand male figure. De Morgan omits.
^{c-d} The whole line omitted by de Morgan.
^{e-f} Copied by de Morgan as .
^g Note the hieratic form of .
^{h-i} Copied by de Morgan as .
^{j-k} De Morgan: .
^{l-m} Here there is an intrusion of light red granite, and the signs are not clear. Copied by de Morgan as .
^{n-o} De Morgan: .
^{p-q} De Morgan: .
^{r-s} De Morgan: .
^{t-u} De Morgan: ; here again there is an intrusion of red granite which obscures the reading.
^{v-w} De Morgan: .
^x At the beginning of l. 12 one square, where the stone is quite rough, is left blank before *hṯy-r*, but this blank is not indicated by De Morgan.
^y De Morgan: . ^z De Morgan: . ^{aa} De Morgan omits.

Notes on the Translation

^a The inscription is addressed to the staff of the local temple, who are assumed to be strictly attentive to their duties. The rendering of the Egyptian third person singular by the second person plural in the opening phrases is enforced by English usage, as we are here dealing with a vocative. On the *sdmty-fy* form used so often in this inscription see Gardiner, *Eg. Gramm.* §§ 363 f.; 394 f.

^b What follows here is apparently a description of the reward due to him 'who shall bend his hand' (l. 7). It is unusual to have the reward described before the mention of the corresponding duties, but Dr. Edel calls my attention to a similar case in 'O ye who live upon earth, servants like unto me, he who shall be in the train of God is he who shall say "A thousand of bread . . ."', etc., *Urk.* I, 112.


^c It is unexpected to find *swdty-fy* without an expressed object, but the English equivalent 'hand over' can likewise have its object omitted.

^d The participle *sw* must qualify *sf*; only thus can the temporary transition from the *sdmty-fy* form to a participle be explained. At one time I thought it possible that *sw ht-f* was really intended for a writing of *sdwt-f* 'his seal' as direct object of *swdty-fy*, but the position after the nominal dative *n sf* precludes such an interpretation.

^e The expression 'after old age' as an euphemism for 'after death' is a commonplace

^t 'At rest in life' means here 'having gone to rest' in the sense of having died. The same expression is used of the setting sun.

^b This sentence was quoted by Gardiner in his article 'On certain participial formations in Egyptian' in *Rev. Ég.* N.S. 1921, p. 48; for the variant *šh n hrr r irrw n-f* cf. id., *Eg. Gramm.* § 357 (p. 273); Lefebvre, *Gramm.* § 451 (p. 222).

¹ Professor Saint Fare Garnot has drawn my attention to Spiegelberg's article 'Ein Formel der Grabsteine' in *ZAS* 45, 67 ff., where similar expressions are collected. Among them the example closest to ours is  'since (it) is more beneficial to whoso does (it) than to him for whom (it) is done. The breath of the mouth is beneficial to a noble, and this is not (something) by which one is wearied.'







¹ Lit. 'him who does it rightly', a curious mode of expression, since *ir mact* would have sufficed. That the expression does indeed refer to right conduct in general and not merely to the right utterance of the name of the deceased, is indicated by the preceding 'I did no wrong to the people of Elephantine'; after a denial of ill-doing comes an affirmation of the reward of right conduct.





^a *Hr pn nfr* must mean 'this my kindly countenance', *nfr* referring not to the external beauty of the speaker but the graciousness of his expression, cf. *Urk.* iv, 347, 13; P. Bremner-Rhind, 1, 22; 3, 5. This sentence and the previous one are to be taken as the customary form of asseveration, though here the oath is by the people of Elephantine instead of god or king (cf. Gardiner, *Eg. Gramm.* § 218 and Wilson, *JNES* 7, 129).

^p Possibly *ir n* 'made by' or the like has been omitted here.

^a *Thwy* is almost certainly identical with *ihy* of *Wb.* I, 121, 10 ff., though as a term for a grade of priests the latter has not hitherto been recorded so early. In Davies and Gardiner, *Tomb of Amenemhêt*, pl. 20 and p. 95 (Dyn. XVIII) the *ihwy*-priests rattle castanets. There they are attached to the cult of a goddess, as is apparently also the case with Sebkro. It is hardly likely that *ihwy* here can be a blunder for *ihwty* 'cultivator', which in any case is normally written with C , despite the fact that there is space for a = between I and B .

In Text A Antef was styled *imy-r ḥmwty wr hrp krt* 'great chamberlain and controller of works', but in Text B the epithet 'great' is omitted. The title *imy-r ḥmwty* is the subject of a long study by Gauthier in *Bull. Inst. fr.* 15, 169 ff.; he has collected 35 cases where this title occurs alone and 15 where it is found in company with 'controller of

⁴ With varr.    and    op. cit. 113 with n. 5. For the name see Ranke, *Personennamen*, 287, 5.

the beauty of Anukis by . . .', an expression which is commonly used of the worship of divinities, e.g. *dw nfrw Hnmw* in . . . 'adoring the beauty of Khnum by . . .', Graffito 70 on the Philae-Aswān road.¹ It is used also of kings, as at the beginning of the Marriage Stela, where the King of the Hittites says to Ramesses II  'I have] come [to thee] that I may adore thy beauty'.² A somewhat similar expression is used today in colloquial Arabic in *صلى على جمال النبي* 'pray on the beauty of the Prophet!' Inscription B likewise begins with an allusion to Anukis. Here we have the *htp-di-nsw* formula used for Anukis alone, without mention of any other divinities of the Cataract region as in some of the other inscriptions. Here Anukis is described as  'Mistress of the Bark of the Hypostyle Hall (?)'. This strange title of Anukis occurs again twice in another Middle Kingdom graffito at Sehēl,³ but here also there is no clue as to its exact meaning. Possibly the last sign may stand for  'hypostyle hall', though  'courtyard' is not entirely out of the question. In any case, the epithet clearly refers to a processional bark which was borne around a hall or courtyard; we may compare the well-known *wi n tp-itrw* 'bark for the river' (*Wb.* v, 274, 10) which figured in the divine progresses on the Nile. On one of the sides of the wooden naos of Kasa from Dēr el-Medīnah, now in the Turin Museum, there is a representation of the goddess in her sacred bark.⁴

Antef begins his speech by saying; 'O all ye priests and all ye scribes of this temple who shall do what your god praises, and who shall desire that the monuments of your local gods endure. . . .' In *JEA* 37, 18 we quoted the beginning of this passage as showing that the temple mentioned here must have been quite near to the graffito and could be nothing but the one the ruins of which lie opposite, on the hill called Hussein-tagoug.⁵ This temple has hitherto been attributed to Amenophis II, since parts of his names were found on some fragments of quartzite discovered in the adjacent debris, but its mention on the graffito of Antef, who lived under Sesostri III, shows clearly that the temple already existed in his time.⁶ Although Antef addresses the priests and scribes 'who shall do what their god praises' and refers to 'the monuments of the local gods', there can be little doubt that the deity in question was really Anukis, since it was to her that the chapel was dedicated. The persons invoked by Antef are further described as 'who shall achieve content in his profession and shall hand over to his son . . . who shall bend his hand on the day of festival in Sehēl and who shall pronounce my name'. To this day it is believed that prayers made on the feast-days of saints are especially efficacious, and in Ancient Egypt the festival of the local deity was considered an occasion particularly appropriate for rites in favour of those whom the worshippers desired to benefit. In the present instance the 'festival of Sehēl' was undoubtedly that of Anukis, the patron deity of the island. Not much is known about this festival, but on one of the blocks of Tuthmosis III from Elephantine three festivals are mentioned;

¹ *Op. cit.* 15.

² *Ann. Serv.* 25, 188. 224.

³ De Morgan, 86 (No. 33).

⁴ Maspero in *Rec. trav.* 2, 197 f.

⁵ For the position of this temple see *JEA* 37, pl. 5, fig. 1 and De Morgan, 76.

⁶ Owing to its presence there, the place opposite is crowded with inscriptions (see p. 50 above). In the Wādi Hammāmāt also, the majority of the inscriptions face the chapel.

168 do not mention Anukis and 27 name this goddess in company with other divinities. In 28 cases we have her name or image or both; in six cases only, her name or a reference to her occurs twice, and in a single inscription where numerous persons are mentioned, her name is found more than twice.¹ In our graffito, however, not only does her name occur twice, but on three other occasions there are allusions to the goddess, her temple, or her festival, so that she is more prominent here than in any other graffito on the island or even in the district. There is doubtless a special reason for this. Sesostris III, in whose reign both Hekaibōnekh and Antef seem to have flourished, was very interested in Aswān and Nubia and built there a number of fortresses and temples.² He was the first king to pay any attention to Sehēl, and the five inscriptions which he left there are therefore the earliest royal inscriptions on the island. Of these, three have but two of the king's names,³ but in the fourth, cut in the NE. corner of Bibitagoug, is the representation of the king, followed by his controller of works, in the presence of Satis,⁴ and in the fifth, cut in the SW. corner of the same hill, the king is shown opposite Anukis.⁵ Both of these latter inscriptions commemorate the canal which this king dug in the region of Sehēl, but that with the representation of Anukis is quite near to her chapel in Husseintagoug, and it may be the earliest inscription with the name or representation of the goddess, for there is none such in the few Sehēl inscriptions which can be dated with certainty as prior to the reign of Sesostris III.⁶ We are therefore probably justified in assuming that it was he who erected or at least renewed the chapel of Anukis, and it may even have been he who established her cult on the island. The Count Hekaibōnekh was overseer of prophets and Antef was chamberlain and controller of works in the reign of the same king. In distinction from the other controllers of works, who came from elsewhere in Egypt merely to quarry stone, Antef lived in the Aswān region in the reign of the king who either built or restored the chapel of Anukis, and had an inscription engraved opposite to it by his friend the overseer of prophets. This suggests strongly that Antef was the architect appointed by Sesostris III to the chapel of Anukis, that Hekaibōnekh was its high-priest, and that Sebk'o was the sistrum-player of the goddess, which would explain the references to the priesthood, temple and festival of Anukis in the graffito here studied. It will be remarked that this hitherto neglected inscription of the chamberlain and overseer of works Antef contains a great deal of interest, and suggests that other graffiti in this district might be studied with profit. I would like to thank the Editor both for printing this article in the *Journal* and for a number of useful suggestions.


¹ De Morgan, 84-102.

² Säve-Söderbergh, *Ägypten u. Nubien*, 76 ff.

³ De Morgan, No. 12 (p. 84) and Nos. 14 and 17 (p. 85).

⁴ Op. cit. No. 20 (p. 86); Sethe, *Lesestücke*, 85.

⁵ De Morgan, No. 39 (p. 87). Sethe, loc. cit.; *Ann. Serv.* 50, 501 ff.

⁶ De Morgan, Nos. 41, 42, 43, 50 (p. 87) are almost certainly earlier than the reign of that king, but none of them bears the representation of any divinity. No. 53 (p. 88), on the other hand, names a certain Khufu . . . who was , see also Weigall, *Ann. Serv.* 11, 171, fig. 3; Gauthier, *Livre des rois*, I, 112 (XIII); Breasted, *History*¹, 127 f.

A THIRTY-SQUARE DRAUGHT-BOARD IN THE ROYAL ONTARIO MUSEUM

By WINIFRED NEEDLER

THIRTY rectangular plaques (pl. IV) in the Egyptian collection of the Royal Ontario Museum, Toronto, bear no trace of the object in which they were originally inlaid and the circumstances of their discovery are unknown. For the following reasons, however, it is certain that they belonged to a draught-board: the set numbers exactly thirty, all virtually complete, of almost identical size, and nearly square; five are inscribed and the rest are without markings of any kind. It is characteristic of the Egyptian thirty-square draught-board to have five specially marked squares.

The squares are made of glazed steatite, a more durable material than wood, faience, or ivory, and doubtless the reason for their survival in relatively good condition, when the rest of the board had perished; three of them have been repaired in modern times. The glaze, which has decomposed, was originally blue, although the present general colour of the surfaces is mottled green and brown. The ancient light grey cement adhering to the backs and edges yields no clue to the nature of the material upon which the squares lay, nor of the strips that separated them from each other. They are approximately 5.5 cm. long by 4.4 cm. wide by 0.5 cm. thick. These measurements would make the board about 54 cm. long, i.e. about the size of the large ebony and ivory draught-board from the tomb of Tutankhamūn.¹

The five inscribed squares are more elaborately designed than are the corresponding squares of other known boards, and are of unusually fine workmanship. The hieroglyphs were carved in the steatite, and were inlaid with lapis lazuli after the squares had been glazed. The lapis lazuli was set in a siliceous material that probably matched the glaze on the flat surfaces; it preserves, however, more of the original turquoise-blue colour. Spectrographic analysis showed that this cementing material contains a high percentage of silicon, fair percentages of lime and copper, and alkalies in very small quantity.² It is friable in its present state, but it is possible that the inlay was actually fixed in position immediately after the squares had been glazed, and while the glaze was still soft; the cementing material might then be the glaze itself.³ Most of the lapis lazuli has been lost, but enough remains to give an excellent idea of the original rich effect of these squares.

¹ See below, No. 12, p. 74.

² Analysis by the Ontario Department of Mines, Laboratories Branch, through the kindness of Dr. D. A. Moddle, Provincial Assayer. I am also indebted to Mr. Wm. Todd, Chief Preparator of the Museum, for careful microscopic examination of all materials.

³ That ancient glaze on glazed steatite can look very different in two different areas of the same object is known in connexion with glazed steatite scarabs, which sometimes show a thicker, friable glaze in the hollows of the legs, while the thinner glaze in combination with the steatite has remained glassy. The clear-cut definition between the two is evident in the magnified photograph published by Bannister and Plenderleith, *JEA* 22, 2 ff., pl. 2 (2).



THE THIRTY DRAUGHT-BOARD SQUARES IN THE ROYAL ONTARIO MUSEUM

The outlines of the inlay pieces are expressive and the surface details are carefully engraved. The square bearing the two ladies has fine engraved work, showing their features, their hair, and their dresses, including the knotted strap over one shoulder. Although both stone and faience were frequently inlaid during the New Kingdom, I have not found a parallel for the inlaying of glazed steatite with any material whatever. The engraving of small lapis lazuli objects, such as scarabs and other seals, became increasingly common during the New Kingdom.¹

The Royal Ontario Museum purchased the squares from the MacGregor Collection sale in 1922. In the sale catalogue they are briefly listed, without illustration, as the



FIG. 1. THE FIVE INSCRIBED SQUARES OF THE SET IN THE ROYAL ONTARIO MUSEUM

thirty squares from a large game-board.² They were described at greater length in 1898 in Wallis's *Egyptian Ceramic Art of the MacGregor Collection*, in which they were wrongly called faience and the inlay was wrongly called deep blue glass (pp. 8 and 9 and fig. 11); a translation of the inscriptions was attributed to Erman. The squares were also mentioned, with translations of the inscriptions, in both of Pieper's articles about the curious 'draught-board text'.³ Miss Nora Scott, of the Metropolitan Museum in New York, has kindly allowed me to quote an unpublished letter from Professor P. E. Newberry to Howard Carter; this letter enclosed a photograph of the MacGregor draught-board no. 247, with our inscribed squares appearing on the same plate. Writing while they were still the property of Mr. MacGregor, Newberry says: 'The inscribed squares below the board belonged, I believe, to another draught-board, but we do not know the relative position of them.' He then gives his own translation of the inscriptions on the squares.

It is not surprising that attempts to translate our five inscriptions differ considerably from each other. The signs clearly form words and phrases but apparently the legends are almost meaningless or else are purposely obscure (fig. 1). Even Pieper's two translations, published in 1909 and 1931 respectively, are not consistent with each other. Mentioning the inscriptions from right to left, in the order shown in the drawings, the \cup in the first square was mistaken for a \cap by Erman and Pieper, who cannot have seen

¹ E.g. H. R. Hall, *Royal Scarabs*, nos. 533. 2110. 2256. Petrie, *Scarabs*, nos. 31. 115. 138. Bracelets from the tomb of Tutankhamun (Carter and Mace, III, pl. 20 and Fox, *Tutankhamun's Treasure*, pl. 48 A, B). Lapis lazuli seals were common in Dyn. XIX.

² *Cat. MacGregor Coll.* (1922), no. 1331.

³ Pieper, *Das Brettspiel der alten Ägypter und seine Bedeutung für den ägyptischen Totenkult* (Wiss. Beilage z. Jahresb. d. kgl. Realgymnasiums, Berlin, 114, 1909); *ibid.* *Ein Text über das ägyptische Brettspiel*, in *ZÄS* 66, 16 ff.

the actual pieces, so that in Wallis's book it is translated 'Every joy by Horus' and by Pieper 'Von Horus stammt alle Freude' (1909) and 'Horus gibt ein freundliches Herz' (1931). Newberry hazarded 'Horus prospers thy affairs'.¹ In Wallis the second square is given 'You associate in peace', while Pieper translates 'Isis und Nephthys vereinigen sich mit dir' (1909), adding 'in Frieden' in 1931. The third square presents no difficulties, at least in its literal translation: 'You mount the stairway of the souls of Heliopolis' is essentially unanimous. In Wallis the fourth square is 'You cross the lake without . . .', while Pieper gives 'Du fährst über dem See, nicht empört sich die Flut gegen dich' (1909) and 'Du fährst über dem See, ohne durch das Wasser zu waten' (1931). The fifth square baffled the translators, so that in Wallis only 'Good shepherd . . .?' was given, and Pieper gave up entirely.

As is well known, a large number of actual draught-boards have been found in Egypt and most of these have been dated to Dyns. XVIII and XIX. With scarcely any exceptions they clearly represent two specific games, distinguished from each other according to the number and arrangement of the squares. The more usual of the two was played on a board of thirty squares arranged in three rows of ten. The other was played on a board of twenty squares arranged in a row of twelve with a row of four on each side at one end, i.e. a four-by-three rectangle with an extension of eight squares from the middle of the shorter side. During the New Kingdom the two boards were often combined on a long reversible box, containing a drawer for the accessories of the game, and having one of the two draught-boards on each of its two broad surfaces. While the thirty-square board had a long history in Egypt and may have been indigenous, the twenty-square board probably was introduced from west Asia during Dyn. XVIII.² Neither of the two other well-known ancient Egyptian game-boards, the game of 'serpent' (*mḥn*)³ and the game of 'pegs and holes'⁴ bears much resemblance to the two draught-boards already mentioned, and all four games seem to be unrelated to each other. The thirty-square game must be discussed at some length in any attempt to interpret the Toronto squares, since it has not been studied with sufficient care, in spite of the considerable quantity of published material relating to it.

To review what is known of the game's early history, one must begin with the Dyn. III tomb of Hesyre⁵ at Sakḥārah. Three game-boards, with their accessory pieces, are pictured there in detail.⁵ One of these is a thirty-square board arranged in three rows of ten squares. Its resemblance to the thirty-square boards of the New Kingdom is still more striking if some signs on the squares are taken into account. One of the corner squares is marked with a single stroke and the fourth square from the same end of that row has four strokes. The tenth square of the same row has a ∩ 'ten' sign; the square at

¹ Newberry's translations were probably not intended for publication and no more of them will be quoted here; they differ radically from the others, except in the case of the third square.

² Pieper, *ZAS* 66, 19, for evidence of the Asiatic origin of the twenty-square board.

³ Montet, *Scènes*, 372-5. Klebs, *Reliefs u. Malereien des N. R.*, 229.

⁴ Drioton, *Un ancien jeu copte*, in *Bull. Soc. arch. copte*, 6, 177 ff., for a complete history of this game during dynastic times.

⁵ Quibell, *Tomb of Hery (Exc. at Saqq. 5)*, pls. 11, 16, reign of Djoser. The three boards are (1) the game of 'serpent', (2) a long rectangular board divided into thirty-two transverse strips, alternately wide and narrow, and (3) the thirty-square board.

the other end of the middle row (adjacent to the single-stroke square) also has a 'ten' sign; and the square at the corner diagonally opposite the first square has a star. Of course there may have been markings, unobserved or completely obliterated, on other squares of this board. Shown in a box close beside it are a set of conical draughtsmen, seven for each side, and a set of four rods probably used as casting sticks. No actual Egyptian draught-boards of Old Kingdom date are known. A clay game board, found at Mahāsna and called Late Predynastic (S.D. 42), is roughly divided into three rows of six squares.¹

Scenes representing a game of draughts occur occasionally in tombs of the Old Kingdom,² when they are always mundane in character and are associated with music and other pastimes. The board, in the form of a long low table, designed for players seated on the ground, is always seen in elevation only, so that it does not reveal the number and disposition of the squares. The number of draughtsmen shown is seven for each side, alternating along the board, and the accompanying inscriptions mention plays of three and two. These tantalizing items of information no doubt described the play vividly to contemporaries. They are lost to us. The pictures, nevertheless, are indirect evidence for the ancestry of the thirty-square game that is so familiar from the actual boards of New Kingdom date. The inscriptions that accompany the Old Kingdom scenes give the name of the game being played as $\overline{\text{mn}}$ mnt . This name also occurs in a list of equipment in a tomb at Meydūm;³ two other words listed close by are identified as two of the game-boards pictured in the tomb of Ḥesyrē.⁴ The name *snt*, then, probably refers to the thirty-square board, the third in the Ḥesyrē group of games. Later inscriptions support this hypothesis, for it is still the name of the game of draughts given in tomb pictures of the New Kingdom and mentioned in the heading of the seventeenth chapter of the Book of the Dead.⁵ In pictures of the New Kingdom the board associated with this name is often seen simultaneously in elevation and in plan and is then marked off in squares. Although the number of squares varies considerably in carelessly drawn examples, there can be little doubt that the thirty-square board is intended.⁶ The hieroglyph *mn* is further evidence that this type of board was common in daily life in very early times. Its early occurrence as the determinative of the word *snt* identifies the *mn* sign as a draught-board, and although it is often drawn with fewer than ten squares

¹ Ayrton and Loat, *Mahasna*, 30, pl. 17, now in Brussels Museum. Drioton, op. cit., 187, thought that this might be a thirty-square board, on the evidence of the published photograph. Examination of the actual board does not bear out the suggestion.

² E.g. Quibell, *Exc. at Saqq.* 3, pl. 64 = N. Scott, *Home Life* (MMA, 1945); Leps., *Denkm.*, II, no. 61; Daressy, *Mera*, 552 text.

³ Petrie, *Medum*, pl. 13, tomb of Raḥotpc, beginning of Dyn. IV.

⁴ The other two words are $\overline{\text{mnt}}$ mnt (*Wb.* II, 60) and mn mnt , which, like *snt*, appears in O.K. scenes.

⁵ In the N.K. the word is usually written with det. mnt , e.g. Budge, *Bk. Dead* (1895), p. 28, and the tomb scene quoted in n. 6. It has been suggested that the name is connected with the verb *sni* 'pass' and may be descriptive of the moves of the game (Jéquier, *Frises d'objets*, 262).

⁶ For an example of a carefully drawn thirty-square board with the name of the game in the accompanying inscription see Wreszinski, *Atlas*, I, pl. 49 (Tomb 219, Dēr el-Medinah, Dyn. XIX-XX). In the vignette to chapter 17 of the Book of the Dead the board is usually drawn without regard to the number of squares or the number of draughtsmen.

in each row thirty squares seems to be the normal number for it.¹ Usually only eight draughtsmen (four for each player), with the opposing sides alternating, are shown in the hieroglyph, instead of the fourteen shown in the Old Kingdom scenes.

A delightfully unconventional game of draughts between two men seated on the ground is painted on a wooden model of a granary, probably datable to Dyns. X–XI.² Like the other pictures on the same object it describes an ordinary moment in the owner's life, without any trace of religious overtones. The name of the game is not given and the squares are not shown, but it certainly represents the thirty-square game, because it closely resembles those pictured in the tombs of the Old Kingdom. The low table is of the same type: seven draughtsmen are shown for each side; and counts of three and two are recorded in the accompanying legend, just as in the earlier pictures.

The board games pictured in the tombs of Baket III and Akhtoi (end of Dyn. XI) at Beni Hasan are more puzzling.³ Again the boards are drawn in elevation only; they are on tables of a different type but the players are still seated on the ground. The pictures occur in a lively context of scenes from daily life. In each tomb two games, shown side by side, are in progress: in the first game there are fourteen draughtsmen,⁴ apparently in two sets of seven, with the opposing pieces alternating and occupying the whole length of the board, and the legend above is $\text{I} \overline{\text{J}}^{\text{a}} |||$; in the second game there are only ten draughtsmen, with the opposing five arranged in two camps at opposite ends of the board, and the legend above is $\text{I} \overline{\text{B}} \overline{\text{J}}$. Although comparison cannot be complete, since the first game in the tomb of Akhtoi is damaged, the arrangement of the games in the two tombs is so similar that one is tempted to believe that some radical difference between the paired games is intended. Petrie thought that the pictures represented two stages of the one game.⁵ The name *snt* does not occur in association with these pictures, and is exceedingly rare in inscriptions of the Middle Kingdom;⁶ but the legend $\text{I} \overline{\text{J}}^{\text{a}} |||$, familiar in the Old Kingdom scenes, indicates some connexion between the Beni Hasan game that carries it and the thirty-square game. Jéquier suggested that two different games were intended, one the thirty-square game, *snt*, and the other perhaps the twenty-square game familiar in the New Kingdom.⁷ He thought that the word $\text{I} \overline{\text{B}} \overline{\text{J}}$,

¹ Griffith, *Hieroglyphs*, 56. For early examples with thirty squares see Quibell, *Tomb of Hesy*, pl. 11 (reign of Djoser), and Petrie, *Medum*, pls. 13, 19 (beginning of Dyn. IV). It is very doubtful whether the Dyn. I sign (e.g. Petrie, *Royal Tombs*, II, pls. 14, 100) is actually an archaic form of the *mn* sign.

² *JEA* 6, 207, pl. 20 (Blackman).

³ *Beni Hasan*, II, pls. 7, 13.

⁴ This number is shown in Newberry's drawings. Wilkinson shows twelve (*Manners and Customs*, I (1854), 192).

⁵ *Objects of Daily Use*, 51. Examination of Newberry's plates makes it clear that Petrie's order is correct, if indeed two stages are intended, and that the reverse order, given in Klebs (*NR* 227), is erroneous.

⁶ I have not been able to find any M.K. mention of it except for the single reference given by Jéquier (Lieblein, *Äg. Denkm. St. Petersburg*, pl. 11), where the word appears on a coffin and accompanies a low table similar to the Beni Hasan draught-tables but with a row of eight dots perhaps representing draughtsmen in plan.

⁷ *Bull. Inst. fr.* 19, 18 f. It is possible that an object shown on the sarcophagus of Kemsit (Naville and Hall, *XIth Dyn. Temple*, I, pl. 23) is a draught-board. It is drawn in plan and elevation: a low table the top of which is chequered black and white, eleven squares long and five squares wide. The chequer design more probably represents matting.

unknown elsewhere, might be the name of the second game, since the first resembled the Old Kingdom pictures of *snt*. Petrie's theory is the more plausible of the two, not only because there is little or no evidence for the twenty-square game as early as this but because the number and disposition of the men in the second game are similar to the pictures of *snt* in the New Kingdom.

There is, however, more direct evidence that the thirty-square game was played during the Middle Kingdom. A model boat from the Middle Kingdom cemetery at Beni Hasan shows two soldiers playing draughts on deck.¹ The players are squatting at each side of a long rectangular board that is clearly marked off in three rows of squares, each row having ten squares; there is no trace of signs on any of the squares, which are indeed too small to be marked easily. At El-Lāhūn Petrie found a wooden trinket-box which he attributed to Dyn. XII.² Inside its lid there was drawn a thirty-square draught-board with squares averaging $1\frac{1}{8}$ inches. The five squares filling the left half of the top row are distinguished as follows: corner square blank, second square ||, third square |||, fourth square ×, and fifth square †. Assuming that Petrie's dating is correct, this is probably the earliest known actual specimen of the thirty-square board. It begins the series of boards with marked squares listed below. In the temenos of the cenotaph of Sesostri III at Abydos Petrie found a similarly inscribed board sketched on a limestone slab;³ he attributed it to Dyn. XII, although the evidence for so early a date does not seem conclusive.

During Dyn. XVIII the thirty-square game seems still to have been played in daily life. The board sketched on the Carnarvon Tablet I could scarcely have been intended for the dead; it must be later than the inscription on the obverse of the tablet, which is dated to Dyn. XVII.⁴ The high quality and secular appearance of many of the boards belonging to Dyn. XVIII are reasons for supposing that they were designed for daily use,⁵ while others, of course, were probably made expressly for the tomb. The fact that the game is mentioned in the Book of the Dead may indicate that it had already acquired special ritual significance; but the contemporary tomb pictures betray no hint of this.⁶ By Dyn. XIX both the thirty-square board and the twenty-square board must have been considered standard equipment for the next world, for draught-boards were then decorated with friezes of funerary inscriptions.⁷

Clues to the manner in which the game was played are scanty and confusing. It is certain that it was partly or entirely a game of chance. Pairs of knucklebones, exactly like the frequent specimens used in the Roman world for games of hazard, have been found with some of the surviving boards⁸ and sets of casting sticks with others.⁹

¹ Garstang, *Burial Customs*, 151, figs. 149, 157, tomb of Nefwy, no. 186. Now in the Ashmolean Museum. I have been able to verify the excavator's assertion that the board has thirty squares, by examination of the actual model.

² No. 1 in the list below.

⁴ No. 4 in the list.

³ No. 2 in the list. No. 3 is very similar.

⁵ E.g. the two larger boards from the tomb of Tutankhamūn (Carter and Mace, *Tut-ankh-Amen*, III, pls. 42 B, 75 B, and no. 12 in the list below); also nos. 5 and 9 on the list.

⁶ See below (p. 68, n. 1).

⁷ Nos. 18 and 19 in the list, both reversible boards dated to Dyn. XIX, bear the *hṯp di nsw* formula.

⁸ Quibell, *Exc. at Saqq.* III, pl. 58; Carter and Mace, op. cit. 131 and pl. 42.

⁹ Carter and Mace, 131 and pl. 75; *Bull. M.M.A.* Nov. 1935, pt. 2, p. 34.

Knucklebones are occasionally shown with the game in tomb pictures of Dyn. XIX.¹ They may not have been used before Dyn. XVIII, but the four casting sticks, strikingly similar to those used in Egypt in modern times, appear in tomb pictures of the Old Kingdom.² During the New Kingdom the wall pictures usually, but not always, show five draughtsmen for each player.³ More than five have sometimes been found in association with surviving boards.⁴ The pictures seem to indicate that the game was one of position only, since no pieces are removed from the board. It seems to have been permitted to pass over a square already occupied, since players are occasionally seen placing a man in an empty square.⁵ During the New Kingdom the opponents' men are usually shown in two separate camps, but in at least two pictures they alternate along the board.⁶ In attempts to reconstruct the play *tab es-siga* has been cited, a game that is played in Egypt and the Near East at the present day.⁷ It employs a board four rows of squares wide and a varying number of squares long. The opposing draughtsmen start at opposite corners of the board and move up the first row, down the middle row, and up the third, removing the opponent's men from the board when entering the same square. The moves are determined by means of a set of four casting sticks. The number of draughtsmen varies but is the same for each side. There are no special squares. It is doubtful whether the comparison of this game with the ancient thirty-square game is really justified.

The ancient boards of the thirty-square type nearly always have five squares especially marked according to the pattern already noted,⁸ although the inscriptions on these five squares may vary considerably in form. The special squares are always in the same order and never vary in position except that they may be either at the upper left corner

¹ Wreszinski, *Atlas*, I, pls. 49, 418; Davies, *Paintings*, pl. 95 (where one only is visible, balanced on top of the player's forefinger).

² Quibell, *Exc. at Saqq.* v, pls. 11, 12, and III, pl. 64.

³ Five for each player are shown in the following Ramesside tombs: *Bull. M.M.A.* Dec. 1922, pt. 2, p. 52, fig. 3 (Nefertari Merenmut); Wreszinski, *Atlas*, I, pls. 49, 418 (both Dēr el-Medīnah, no. 418 a stela); Davies, loc. cit. (Tomb 178, Thebes). Five are probably shown in Davies and Gardiner, *Tomb of Amenemhēt*, pl. 26 (Dyn. XVIII, Tuthmosis III, reconstruction uncertain). In the Medīnet Habu harem scene (Hölscher, *OIP* 55, pl. 23) the king seems to have seven draughtsmen and the girl six (the same relief in *Leps.*, *Denkm.* III, 208 shows eight for the king). The Brit. Mus. papyrus with a scene of animals playing draughts (*Guide to Eg. Coll.*, 1930, 97, fig. 36), which must be a satire on such a scene, shows five for each side. The funerary scene of Meneptah in the Osireion, Abydos (*EEF Report*, 1911-12, pl. 2, fig. 6) shows a total of six diverse animal-headed pieces on the board; and the summary vignettes to the seventeenth chapter of the Book of the Dead usually show less than five for each player.

⁴ E.g. MacIver and Mace, *El Amrah and Abydos*, pl. 51. It must be remembered that draughtsmen were deposited for both games of the reversible board. According to the sets from the tomb of Tutankhamūn, each game had five men to a side (Carter and Mace, III, pl. 42 b). I fail to see the reason for the belief that six draughtsmen were employed on each side (*Objects of Daily Use*, 53; Nash in *Proc. SBA* 24, 345).

⁵ Thus in Davies, *Paintings*, pl. 95 (Tomb 178, Thebes) and in the Medīnet Habu scene, although the latter may represent a different game.

⁶ They alternate in Wreszinski, *Atlas*, I, pl. 418 (Dyn. XIX-XX) and seem to do so in Davies and Gardiner, *Tomb of Amenemhēt*, pl. 26 (Tuthmosis III). Alternation might be interpreted as two rows of men, each row to a side.

⁷ Lane, *Manners and Customs of the Modern Egyptians*, II (Everyman ed., 1923), 353 ff. The parallel is cited by Carter in Carter and Mace, III, 131. Pieper's numbering of the squares is in the same order.

⁸ See the list at the end of this paper.

or at the lower right corner of the board, i.e. the bottom of the signs may be either nearest the middle of the board or nearest its edge. They always number, however, from the corner towards the middle of the row, so that the *nfr* square is at the inner end. The direction of the *signs* may exceptionally be in the opposite direction, each separate square reading *away* from the middle of the row.¹ Petrie recognized that this pattern existed and listed eight examples and two fragments, in addition to the Ḥesyrē board.² In drawing up a longer list I am assuming that the marked squares have not received sufficient attention. It is strange, for instance, that they were not discussed at all by Klebs.³ Petrie ignored them in his speculations concerning the rules of the game.⁴ Others have expressed the view in vague terms that they were important in determining the moves of the players.⁵ Pieper considered, on the other hand, that they were of religious rather than practical significance.⁶ The unusual inscriptions on the Toronto squares have been quoted by him in connexion with the latter hypothesis.⁷ To re-examine them in the light of a larger series of boards may help to dispel some of the confusion that surrounds the game and to establish the functional importance of the five special squares, although there is little hope of reconstructing the play.

It has sometimes been taken for granted that the players sat at the ends of the board. This is an error that probably increased the difficulties of interpreting the ancient pictures and tended to minimize the importance of the inscribed squares on surviving boards. Thus Petrie said 'From the drawings it is clear that the players sat at the ends of the board',⁸ and this is the position given in Herget's reconstruction.⁹ It is reasonable, however, to interpret the pictures as showing the players seated at the sides, since plan, side elevation, and front elevation are normally shown together in Egyptian graphic art. The game must have been a familiar one, so that the pictures could not have been ambiguous to their contemporaries. In fact the scene could not well be shown otherwise, because the board drawn in side elevation, or in plan combined with side elevation, must not interfere with the players' action. The question is settled, however, by the thirty-square game on shipboard from Beni Ḥasan.¹⁰ This is the only known ancient Egyptian model in the round to show a game of draughts. The position of the players is important in connexion with the five special squares, because the boards never have a corresponding series of marked squares at the other end of the row or at the opposite

¹ This is the case with nos. 13 and 16 in the list.

² *Objects of Daily Use*, 52. Nash had already pointed out several (*Proc. SBA* 24, 341 ff.).

³ *Reliefs und Malereien d. N. R.* 227 f.

⁴ Loc. cit.

⁵ Thus Hayes described them as being 'advantageous or disadvantageous' (*Nat. Geographic Mag.*, Oct. 1941, 489) and Griffith as 'indicating their place in the game' (Carnarvon and Carter, *Five Years' Exploration at Thebes*, 1912, 36). An anonymous fanciful reconstruction of the game in *Chron. d'Ég.*, Jan. 1930, 124 ff., gives the five squares importance but is inconsistent with the evidence. A reconstruction in E. Falkener, *Games Ancient and Oriental* (1892), where these squares are discussed at great length, is altogether fantastic, as are most of the statements in the book.

⁶ *ZAS* 66, 20: 'Im allgemeinen lässt sich sagen, dass die Inschriften eine religiöse Bedeutung haben, als dass man sie für den Gang des Spieles verwerten könnte.'

⁷ *Brettspiel*, 10, and *ZAS* 66, 19 f.

⁸ *Objects of Daily Use*, 52. Klebs (*NR* 226) also stated that the players sat at the ends of the board.

⁹ *Nat. Geographic Mag.*, Oct. 1941, 490 (Hayes).

¹⁰ See p. 65, n. 1 above.

corner, and if these squares have any significance in the game they must have been used by both players on equal terms.

The only picture of draughts known to me in any tomb of Dyn XVIII apparently represents a secular scene from daily life like those of earlier periods.¹ During Dyn. XIX it was a more frequent subject for tomb decoration and changed its character somewhat. With the general trend at that date towards subjects of purely ritual significance, the scene usually assumed the form of an imaginary game played by the deceased with an invisible adversary. This is of course drawn from the vignette to the seventeenth chapter of the Book of the Dead, where the game of *snt* is mentioned in the chapter heading as among the pleasures to be enjoyed in the after-life.² In at least one tomb-painting of Ramesside date two players are seen while the accompanying text quotes from this passage.³ It is usual, however, for the wall pictures to follow the papyri in showing only the owner at the board.

An entirely different step in the removal of the game from daily life into the realm of theological fantasy is seen in a curious religious text concerning a draught-board.⁴ This text was found in a hieratic papyrus in Cairo, in a hieroglyphic papyrus in Turin, and on the wall of a tomb dated to Dyn. XX. The papyri are also dated to Dyn. XX on palaeographic grounds, and the magico-religious character of the text, suggesting the *Book of Am Duat*, supports the view that it did not originate until late Ramesside times. It seems to describe the deceased's adventures after death in terms of a game of draughts, a notion that would be in keeping with the religious attitudes of that period. The papyrus in Turin includes a damaged sketch of a draught-board three squares wide and ten squares long, in which all thirty squares contained signs representing the player's progress through the underworld. There is clearly correspondence between the drawing and the journey described in the text, although both are far from complete. Five squares on the drawing, moreover, correspond in position and design to the five squares normally inscribed on *snt* boards,⁵ and it is inferred from the text that the player commenced the game from the opposite corner, proceeded along the top long row from left to right, and perhaps along the middle row from right to left as far as the fifth square. The text seems to refer to the fourth square from the right in the bottom row (*mw*) as a pitfall from which the opponent's men are forcibly removed (to the part of the board from which they started?)⁶ and the fifth square (*nfrw*) in the same row as the final goal, attained by all the player's men.⁷ The game described in this text is so

¹ Davies and Gardiner, *Tomb of Amenemhēt*, 70 and pl. 26 (Tuthmosis III). The top of the board is not shown and the name of the game is not given.

² E.g. Budge, *Book of the Dead* (1895), 27 f. In *Tomb of Amenemhēt*, loc. cit., Gardiner named four Ramesseid tombs in which the scene occurs. See also p. 66, n. 3 above.

³ Wreszinski, *Atlas*, 1, pl. 49.

⁴ See p. 61, n. 3 above. A translation of the text is given in Pieper's second article (1931). A reconstruction of the board from the drawing in the Turin copy of the text is given in Pieper's first article (1909), fig. 8. The text was first described by Wiedemann in 1894 (*Actes du 10^e Congrès des Or. à Genève*, 4, pp. 41, 50).

⁵ See no. 20 in the list.

⁶ 'Ich nehme seine Steine fort und werfe ihn in das Wasser, dass er ertrinke mit seinen Steinen' (Pieper's translation).

⁷ 'Festgestellt sind meine Steine im schönen Hause, ich bin vollzählig im schönen Hinterhause (?)' (Pieper's translation).

remote from daily life that these clues may be of little value.¹ Pieper suggested that the game was won on the fifth square from the right in the middle row.² The theory is chiefly based on the interpretation that Mehen is the opponent in the first part of the game,³ up to the presumed mention of this square, while in the subsequent passages, which seem to deal with the bottom row of squares, Mehen is friendly with the player.⁴ This hypothesis receives some support from three draught-boards in which the square in question is specially marked.⁵ Moreover, an astrological text of the third century A.D. may possibly have a remote connexion with the original game; it refers to a mystical thirty-square draught-board in which the sum of the ordinal numbers for the squares from the fifteenth to the thirtieth is equated with the number of days in the year.⁶ In each of the three surviving boards where this middle square is specially marked the design seems to be purely decorative, in obvious contrast to the other marked squares of the same boards; its functional importance is therefore doubtful.

A wooden draught-board that is undoubtedly in the same class as the board figured in this strange text was found by Mond in the courtyard of the tomb of Kenamün at Thebes.⁷ He described it as a board three rows of squares wide and eleven squares long, 'much charred by fire', and having 'hieroglyphic signs on some of the squares'. He illustrated it with a diagram in which the figures appear in reverse because they are reproduced by means of the Cairo fount. Careful examination of the board, which is in the British Museum, shows the extent to which the published description and illustration are at fault. It is so badly charred that a considerable section of the surface is completely missing but measurement of the surviving squares shows that it was actually a thirty-square board. It is clear that *all* the squares were inscribed; there are traces of figures wherever the original surface has survived and in at least two squares where Mond failed to note them. The inscriptions correspond strikingly with the board of the 'draught-board text', and I should like to date the wooden board to the same period. The errors in its original publication have been perpetuated in subsequent discussions.⁸

¹ The other attempts at reconstruction of the game given in the earlier and more popular of Pieper's two papers are very fanciful, and have little relation to the facts.

² In the drawing on the papyrus a frog (Hehet?) is shown on this square and the passage that presumably refers to it is 'Ich gelänge mit der Sonne zum Hause des Neuen Lebens' (Pieper's translation).

³ *ZAS* 66, 34. Why is it assumed from the first of the two passages that mention Mehen by name that this god is the opponent rather than simply patron of the game? The passage in question is, according to Pieper's translation, 'Ich näherte mich dem Mehen, ich hebe ihm seine Steine und lege sie an den Ort, wohin ich siehe die Neith . . .'.
⁴ 'Der Mehen legt Zeugnis ab (?) für mich, er gibt mir Brot in das Haus des Brotes, kühles Wasser in das Haus der Kühlung.'

⁵ Nos. 5, 7, and 12 in the list. The Berlin board (no. 7) is the only one of the three quoted by Pieper.

⁶ Grenfell and Hunt, *Oxyrynchus Papyri*, III, 141 f. (mentioned in both the cited articles by Pieper).

⁷ *Ann. Serv.* 5, 96. The tomb is dated to Amenophis II. Objects found with the board were of mixed date. The board is no. 21 in the list below.

⁸ I was able to study this board through the kindness of Mr. I. E. S. Edwards, who confirmed the identification. Two squares in the top row (1st and 5th from the right) are wrongly restored by Mond, and another (the third) is wrongly omitted; in the middle row the second, third, and sixth are wrongly restored; and in the bottom row, the $\begin{smallmatrix} \text{I} \\ \text{I} \\ \text{I} \end{smallmatrix}$, which appears in its normal position as the last of the five special squares, is omitted although clearly visible. Out of fourteen squares surviving in this Brit. Mus. board nine undoubtedly correspond to the board of the 'draught-board text', as reconstructed by Pieper, while four (badly damaged) probably do. The remaining square (6th in the middle row) is missing in Pieper's diagram.

These two boards, which must have originated in an ordinary game of daily life, have obviously a magico-religious meaning. The other surviving draught-boards do not seem to show any trace of comparable developments, and therefore the numerological conceits that were connected with the thirty-square board in Ramesside and later times need scarcely concern us here.¹ The board of the 'draught-board text' has been described in an effort to show that the five marked squares of the secular boards were incorporated quite naturally into its scheme. This question is important in connexion with the Toronto squares. Pieper thought that the latter were an earlier manifestation of the same kind of religious dogma.² There is clearly some connexion between the two boards; but the secular origin of the allegorical board is sufficient to explain it.

The inscribed squares of the Toronto draught-board differ so greatly from those of the usual thirty-square board that their conformity to the normal pattern may not easily be conceded. But each of our squares possesses a sign that relates it to a corresponding square in an ordinary board. This correspondence would not be significant in the case of any one of the squares alone; it is the consistent occurrence of the appropriate sign in each of the five that is difficult to explain as mere coincidence. We have therefore arranged our squares in the order shown on Plate IV. Pieper arranged them in the same order, except for the 'Horus' square, which he identified with the fifth square from the right in the middle row (according to his theory about the special importance of the latter square), leaving the first square (his thirtieth) blank. It has been said above that Pieper paid undue attention to the middle square, and there are other reasons for preferring to place our square first in the series. In two well-authenticated boards the first square contains \odot .³ It contains Horus in the board of the 'draught-board text' and 𓆎 in the similar board published by Mond.⁴ The four strange boards of unknown provenance in University College all have a falcon on the first square,⁵ and so have two boards in the British Museum,⁶ one at least of which seems closely related to the latter boards.

The pattern for the five marked squares of thirty-square boards may be described as follows: (1) blank or *one* (god, human, &c.), (2) *two* (strokes, humans, gods, &c.), (3) *three* (strokes, gods, humans, &c.), (4) \times or *water*, (5) \dagger or $\dagger\dagger\dagger$. If these five squares are of special significance in the game, as the evidence suggests, one is forced to the conclusion that the progression was from the corner to the middle of the row, and not in the opposite direction as assumed by Pieper and others. It is tempting to suppose that the *nfr* square is the goal and the *mw* square a pitfall (from which the draughtsman was sent back to another part of the board?). A position at the end of a special sequence would make such a role for the *nfr* square much more plausible, and the space immediately preceding it would be a fitting place for a penalty square. A pitfall is suggested by the \times of the earliest specimens and perhaps by *mw*, since water can be a barrier. The 'draught-board text' seems to imply these meanings for the two squares, and conversely, the

¹ For the thirty-square board's mystical associations with the College of Thirty, with the thirty days of the month, and with the year see both of the cited works by Pieper, and also Drioton in *Bull. Soc. arch. copte*, 6, 187 f.

² Pieper, *Brettspiel*, 10; *ZÄS* 66, 20.

⁴ Nos. 20 and 21 in the list.

⁵ Nos. 22 to 25 in the list.

³ Nos. 10 and 16 in the list.

⁶ Nos. 19 and 26 in the list.

functional importance of the five marked squares makes the supposed references in the text to the *mw* and *nfr* squares more comprehensible. The function of the five blank squares beyond the *nfr* might be explained in the following manner: assuming that the object of the game was to have each draughtsman in turn reach the *nfr* square the latter would serve as a gate to the five remaining squares, so that the final count would chiefly or entirely depend on the number of men that each player had in these squares;¹ points might be added, perhaps, for men on the marked squares and subtracted for any remaining in the other two rows. The draughtsmen, probably five for each side, might begin the game at the end of the board farthest from the marked squares, each side occupying one of the two unmarked rows.² The men would progress towards the other end of the board, perhaps crossing and re-crossing from one row to the other, or even making some backward moves, in an effort to block or circumvent the opponent. Having succeeded in reaching the last square in one of these two rows a draughtsman would begin the progression along the five special squares, where the two sides would be competing for position, trying to avoid the *mw* square before reaching home on the *nfr* square. Probably only one man at a time would be allowed on each square. To ensure free competition on the five marked squares the rules might compel the player who had a man on the first of these squares to move it forward as soon as a throw permitted him to enter a free square.

This is not intended as a serious reconstruction of the game, which is likely to remain at least a partial mystery. It is only a suggested line of approach that would be consistent with the evidence. If any more attempts to solve this mystery are made in future—as doubtless they will be by adventurous game-lovers if not by Egyptologists—the five special squares should be duly taken into account instead of being neglected or misunderstood as they have been in the past.

When the surviving thirty-square boards are compared in chronological order it is clear that the more elaborate boards developed out of the simple form and that the elaborations are many and varied. The substitution of more complex signs or pictures for the simple original series seems to have been inspired, at least at first, by aesthetic as much as by religious motives. It is possible that the Toronto squares, which are extreme examples of elaboration, may still have been intended for the living. The religious phrases that adorn them seem to be nothing more than light-hearted spells for good luck. The size and fine workmanship of the board suggest that it was designed for use on earth.

The Metropolitan Museum possesses a thirty-square draught-board belonging to the reign of Hatshepsut (fig. 2)³ that is as strikingly elaborate as the Toronto board. It is remarkably different, however, from the latter. Each of its five squares forms a little

¹ Cf. the quotation from the text on p. 68, n. 7, above.

² The occasional marking of the fifth square from the right in the middle row (in nos. 5, 7, and 12 in the list) might possibly indicate the initial position of the draughtsmen or the first move, since it would be the first free square in that row at the beginning of the game.

³ No. 5 in the list and fig. 2. The fourth and fifth squares are shown in the wrong order in the publication cited. I was able to verify this through the kindness of Miss Nora Scott, who sent me a photostat of the excavation card containing a drawing of the squares *in situ*.

picture, mundane in character and freely drawn. The second, third, fourth, and fifth squares reveal the normal pattern for these squares (*two men, three cows, boat on water, man with three nfr*). But the first square is puzzling. It shows seven papyrus plants growing out of a pool and birds flying above. Might the suggestion be hazarded that this square stands for *begin*, representing an abbreviated and pictorial rendering of the word *šr*? If this be so it is another shred of evidence for our interpretation of the five squares. In any case the board is an interesting parallel to ours, because of its extreme elaboration. Three detached squares from Abydos (late Dyn. XVIII) deserve

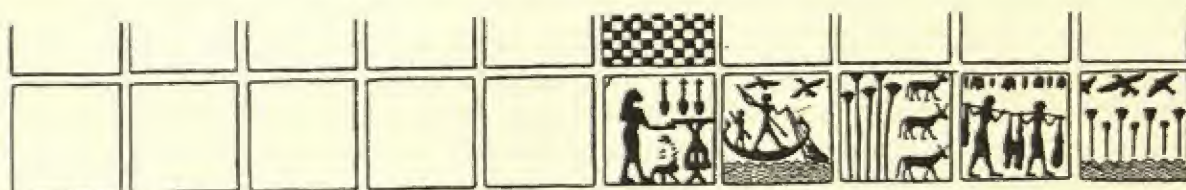


FIG. 2. THE MARKED SQUARES ON THE DRAUGHT-BOARD FROM DÊR EL-BAḤRÎ, METROPOLITAN MUSEUM, NEW YORK

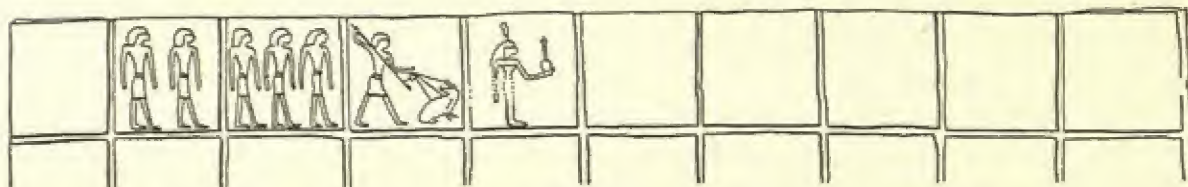


FIG. 3. THE DRAUGHT-BOARD IN THE FITZWILLIAM MUSEUM

mention for the same reason,¹ particularly the *mw* square, which shows a fish, plants, and water, very freely drawn.

The inscriptions on most of the other boards suggest that they were not far from association with daily life even when manufactured expressly for the tomb. One that is quite distinct and secular in appearance is an unpublished board in the Fitzwilliam Museum (fig. 3).² Its second and third squares show standing men, instead of the usual seated men. The hippopotamus-spearer for the fourth square seems to be a further stage in the development of the water theme from the variation shown in the New York board. In the fifth square is a figure of Mâket holding a *nfr*. In the more usual boards the *bw* birds seem to be much more common for the third square than the three seated men, which appear only on the Leyden board³ and on a board in the British Museum;⁴ but for the second square the two seated human figures (women in one case)⁵ occur in every board that has the *bw* birds, except one in Cairo which substitutes two *ntr*.⁶

The custom of depositing in the tomb draught-boards that represented an ordinary game of daily life probably was dying out during Dyn. XIX, before the magico-religious allegory associated with the thirty-square board was invented; and in daily life the game may gradually have been superseded by other board-games. If the series of unusual

¹ No. 11 in the list.

² No. 14 in the list.

³ No. 13 in the list and fig. 3.

⁴ No. 6 in the list.











⁵ No. 17 in the list.

⁶ No. 16 in the list.

boards with five inscribed squares in University College and the British Museum¹ are really of the Late Period, as Petrie believed, they may be archaistic funerary copies of the Dyn. XVIII boards. The Toronto board may have been used during life, and does not seem to be later than Dyn. XIX. It fits into the general pattern of the Dyn. XVIII boards, but style, material, and technique suggest an early Dyn. XIX date. One might look to scarabs for parallel work, since glazed steatite was chiefly used for scarabs and the same artisans might be employed for both. It was in Dyn. XIX that magic formulas became common on scarabs.² Our five squares resemble the inscriptions on these scarabs in decorative style even more than in subject matter. The costume of the two ladies is correct for early Dyn. XIX. At that time lapis lazuli scarabs with linear engraving were fashionable, and steatite scarabs had a glaze similar in quality and in colour to the glaze of the Toronto draught-board.
























































Thirty-square Draught-boards with Marked Squares

This list comprises the total number of such boards described in the present study. The five squares indicated number from the upper left or lower right corner, and are contiguous along one of the outer rows. The remaining twenty-five are blank except where specially noted.
























1. From the town of Sesostri II at El-Lāhūn. Painted inside the lid of a wooden trinket-box. Dyn. XII. Petrie, *Kahun*, pp. 24. 30 (described but not illustrated).
Five squares: (1) blank, (2) II, (3) III, (4) ×, (5) .
2. In University College, London. From sand at top of shaft of cenotaph of Sesostri II at Abydos. Limestone. Dyn. XII or later. Petrie, *Abydos*, III (1904), pp. 23. 53 and pl. 40.
Five squares: (1) blank, (2) II, (3) III, (4) ×, (5) . (The  is given by Petrie in *Objects of Daily Use*, p. 52; it is unrecognizable in the drawing in *Abydos*, III.)
3. In University College, London. 'From Memphis.' Limestone. Petrie, *Objects of Daily Use*, p. 53 and pl. 47 (2).
Five squares: (1) blank, (2) II, (3) III, (4) ×, (5) .
4. From Dēr el-Baḥrī. Sketched on wood, Carnarvon Tablet I. Dyn. XVII or later. Carnarvon and Carter, *Five Years' Exploration at Thebes*, p. 26 (Griffith).
Five squares: (1) blank, (2) II, (3) III, (4) ×, (5) . In hieratic.
5. In Metropolitan Museum, New York (fig. 2). From Dēr el-Baḥrī. Faience squares inlaid in wood. Reign of Hatshepsut. *Bull. M.M.A.* 30, pt. 2, p. 33 and fig. 6.
Five squares: (1) lotus pool (?) with birds, (2) two standing men with yokes, (3) three cows in front of five papyrus stalks, (4) boat with fish-spearer and helmsman, (5) god before table (?), three  above. The fifth square from the right in the middle row is decorated with a plain chequer pattern.
6. In Louvre Museum. Faience. With cartouche of Hatshepsut. Mentioned in Vandier's *Guide* (1948), p. 63.
Five squares: (1) blank, (2) , (3) , (4) , (5) .
7. In Berlin Museum. Early Dyn. XVIII. Pieper, *Das Brettspiel*, &c., fig. 5 (a) (material not given).

¹ Nos. 22 to 26 in the list.

² E.g. Newberry, *Scarab-shaped Seals (CGG)*, pl. 6.

- Five squares: (1) blank, (2) , (3) , (4) , (5) . The fifth square from the right in the middle row is marked with a decorative rosette.
8. In Louvre Museum. From Thebes. Faience. Dyn. XVIII. Described but not illustrated in Boreux, *Catalogue-Guide* (1932), p. 585.
Five squares: (1) blank, (2) , (3) , (4) , (5) .
9. In Brooklyn Museum. From Thebes. Faience. Dyn. XVIII. *Cat. MacGregor Coll.* (1922), no. 247 and pl. 3.
Five squares: (1) blank, (2) , (3) , (4) , (5) .
10. In Metropolitan Museum. From Abydos. Faience squares inlaid in wood. Late Dyn. XVIII. MacIver and Mace, *El Amrah and Abydos*, pp. 72. 91 and pl. 51.
Five squares: (1) , (2) , (3) , (4) , (5) .
11. From Abydos. Glazed squares (three only). Late Dyn. XVIII. MacIver and Mace, *op. cit.*, pp. 77. 97 and pl. 49.
Five squares: (1) missing, (2) , (3) , (4) fish, plants, and water, (5) missing.
12. In Cairo Museum. From tomb of Tutankhamūn. Ivory squares inlaid in ebony. *Illustr. Lond. News*, Oct. 5, 1929, p. 577 and Carter and Mace, *Tut-ankh-Amen*, III, p. 130 and pl. 75 (b).
Five squares: (1) blank, (2) , (3) , (4) , (5) . The fifth square from the right in the middle row is marked   . (The squares are not shown in either publication. The other boards from the tomb of Tutankhamūn have no figured squares.)
13. In Fitzwilliam Museum, Cambridge (fig. 3). Wood. Dyn. XVIII (?).
Five squares: (1) blank, (2) two standing men, (3) three standing men, (4) man spearing hippopotamus, (5) Mā'et holding *nfr*.
14. In British Museum. Wooden squares inlaid in ivory. Dyn. XVIII (?).
Five squares: (1) blank, (2) , (3) , (4) missing, (5) .
15. In British Museum. Faience squares inlaid in ivory. Dyn. XVIII.
Five squares: all missing except the fifth, which is marked .
16. In Cairo Museum. From Saqqārah. Wood. Reign of Sethos I. Quibell, *Excavations at Saqqara*, III, pp. 114-15 and pl. 19.
Five squares: (1) , (2) , (3) , (4) , (5) .
17. In Leyden Museum. Wood. Dyn. XIX. Leemans, *Aeg. Mon. Leiden*, II, pl. 244.
Five squares: (1) blank, (2) , (3) , (4) , (5) .
18. In Royal Ontario Museum, Toronto. Glazed steatite squares with inlay of lapis lazuli. Dyn. XIX (?).
Five squares: see fig. 1.
19. In British Museum. Limestone.
Five squares: (1) falcon with double crown, (2) , (3) , (4) , (5) .
20. In Turin Museum. Sketch on papyrus accompanying the 'draught-board text'. Dyn. XX. Pieper, *Brettspiel*, p. 6, fig. 8.
Five squares: (1) Horus with *atef* crown, (2) goddess with double crown and falcon-headed god, (3) Thoth and two Maats, (4) , (5) . All the squares on the board were inscribed.
21. In British Museum. From Thebes. Wood. Dyn. XX (?). *Ann. Serv.* 5, 98 (Mond). (Published wrongly as a thirty-three-square board.)
Five squares: (1) , (2) , (3) , (4) , (5) . This board, badly damaged, had all its squares inscribed, and was similar to the draught-board in the Turin papyrus (no. 20).
22. In University College, London. Slate. Petrie, *Objects of Daily Use*, pp. 52 f. and pl. 48 (3).
Five squares: (1) , (2) , (3) , (4)  (two ripples only), (5)  (?).

This and the following three boards (nos. 23, 24, 25) were bought on the market by Petrie and are of unknown provenance. They are similar to each other in style and similar to the board in the British Museum listed below (no. 26), which is also of unknown provenance. Petrie called them Dyn. XXVI-XXX (on account of the material of numbers 23 and 24?). The figures are crudely and incorrectly drawn.

23. In University College, London. 'Very absorbent blue paste.' Petrie, *op. cit.*, p. 53 and pl. 48 (5).
Five squares: (1) 'Horus of gold' wearing double crown, (2) two  confronted, (3), (4), and (5) missing.
See no. 22 above.
24. In University College, London. 'Blue paste.' Petrie, *op. cit.*, p. 53 and pl. 48 (3).
Five squares: (1) falcon on tall perch and , (2)   =, (3) =   , (4) and (5) missing.
See no. 22 above.
25. In University College, London. Steatite. Petrie, *op. cit.*, pp. 52 f. and pl. 48 (4).
Five squares: (1)  , (2)  , (3)   , (4) boat on two ripples, (5)  combined with .
See no. 22 above.
26. In British Museum. Limestone. (Mond Collection.)
Five squares: (1) falcon with double crown (?) on shrine and , (2)   , (3)    (?) = (damaged), (4) illegible, (5) missing.
See no. 22 above.

Acknowledgements. I am greatly indebted to Miss Nora Scott of the Metropolitan Museum for the material that she has put at my disposal and for much other information; to Mr. W. C. Hayes of that museum for permission to publish the early Eighteenth Dynasty board; to Professor S. R. K. Glanville of Cambridge University for permission to publish the board in the Fitzwilliam Museum; and to Mr. John Cooney and Mrs. Elizabeth Riefstahl of the Brooklyn Museum, Mr. I. E. S. Edwards of the British Museum, M. Jacques Vandier of the Louvre Museum, Mr. A. J. Arkell of University College, London, and Mr. R. J. Williams of the University of Toronto for further valuable assistance.

THE SUDAN ORIGIN OF PREDYNASTIC 'BLACK INCISED' POTTERY

By A. J. ARKELL

IN *Mostagedda*, 106, Brunton suggested that all the incised black pottery found in Egypt was of Nubian or at least of southern origin. Petrie had from the first recognized that this pottery which came sporadically from predynastic sites in Egypt was not native to Egypt, and one wonders whether the reason that he gave it the letter N to designate it as a class was because N is the initial letter of Nubia. Still, in *The Making of Egypt*, 45, he decided against the probability of its being of Nubian origin. And the latest study of the Predynastic period by J. Vandier in his *Manuel d'Archéologie Égyptienne*, tome 1, published in 1952, merely states (pp. 302-3) that this kind of pottery is found all over the Mediterranean basin and that it seems that it is of foreign origin, which would explain its relative rarity in the Nile Valley.

To Vandier the Nile Valley is synonymous with Egypt, and yet there are some 1,300 miles of that valley as the crow flies south of the southernmost site at which has been found the Decorated Ware characteristic of the Gerzean period, during which most of the 'Black Incised' pots now under review are found in graves in Egypt. It would therefore not appear superfluous to show that while this ware is foreign to that part of the lower Nile Valley where the Gerzean culture was at home, it is not foreign to the Nile Valley as a whole, and must have come from that valley south of Egypt, possibly from as far south as the Khartoum area, where pottery has recently come to light that is certainly related to the 'Black Incised' ware and probably ancestral to it.

The unburnished brown pots of the Khartoum Mesolithic period that were decorated with combing or impressed decoration to make them resemble baskets almost all had simple undecorated rims (see my *Early Khartoum*, 66-67). The pottery of the Khartoum Neolithic period which follows in the Khartoum area is, however, not only frequently burnished, but there are primitive forms of black-topped ware and of black ware, and a surprising variety of rims (for 34 rim shapes see pl. 36 in my *Shaheinab*, now in the press) and of impressed decoration on those rims (for 40 varieties, see *Shaheinab*, pl. 37). Some of these rim decorations are reproduced in fig. 1.

One form of decoration, see varieties 34-38, is an elaborate one requiring two separate operations, and is unlikely to have been invented independently in two different places. It consists of an impressed narrow zigzag in thin line made by 'walking' a fragment of shell on the rim, as in variety 30. On top of this as a second operation slanting strokes are incised to form a wide zigzag in rather thicker line as in variety 29.

Forms of this same complicated rim decoration occur (see fig. 2) on a number of examples of 'Black Incised' ware from Predynastic Egypt, viz.:

- (1) A fine close zigzag of slightly curved vees, about 6 vees to 10 mm., on which

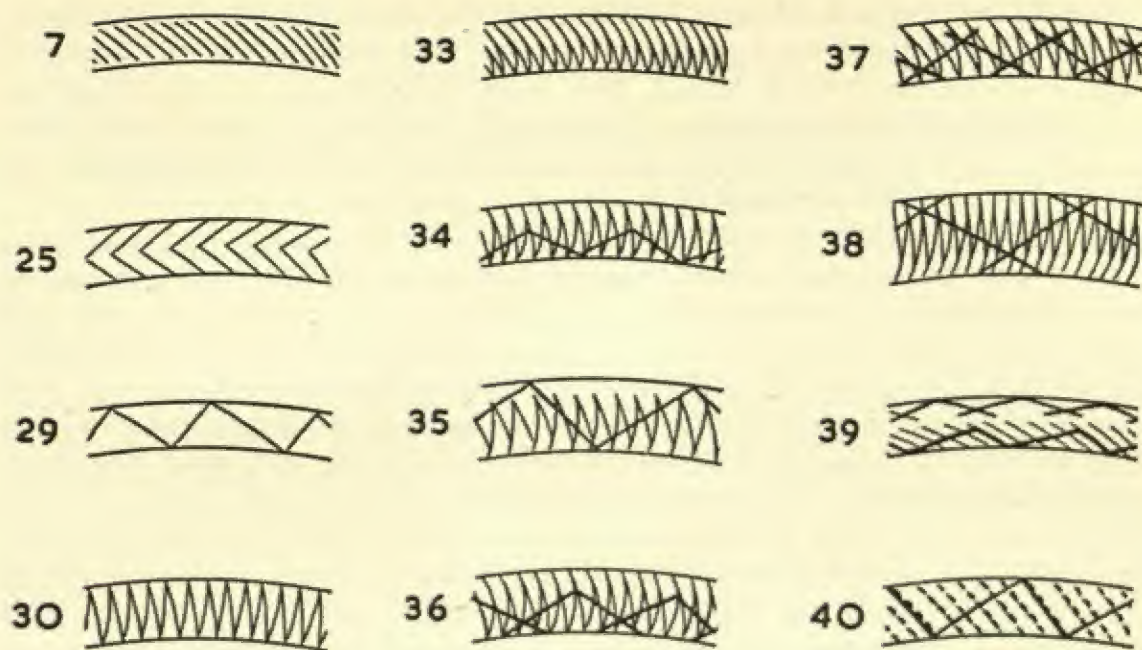


FIG. 1. SOME KHARTOUM NEOLITHIC RIM DECORATIONS

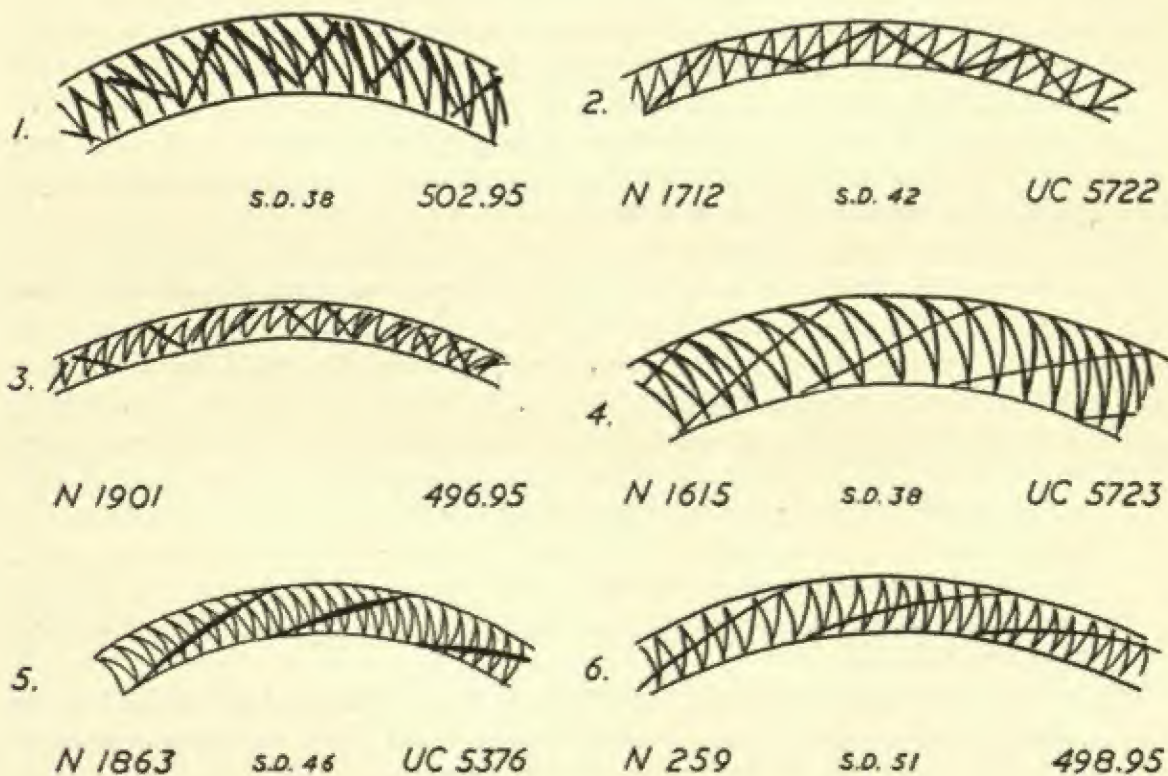


FIG. 2. SOME 'BLACK INCISED' RIM DECORATIONS

- have been incised wide straight-sided vees with arms about 15 mm. long, covering four or more vees of the fine close zigzag. This occurs on the rounded rim of a flat-bottomed black incised bowl from Naḳādah now in the Ashmolean Museum, Oxford (registration No. 502-95), published in *Nagada and Ballas*, pl. 30, N 20 and *Prehistoric Egypt Corpus*, pl. 26, 20 N (grave number not recorded). This was dated by Petrie to S.D. 38 (*Corpus*, pl. 51).
- (2) A rather irregular close zigzag of straight-sided vees, about 3 vees to 10 mm., but in one place much closer, on which have been incised straight lines slanting alternatively up to right and up to left, forming vees about 17 mm. wide with straight sides about 10 mm. long, each line covering about four vees of the closer zigzag. This occurs on the flattish rim of a flat-bottomed bowl of brownish black ware decorated with an incised pattern similar to the foregoing bowl. It is now at University College, London (Catalogue No. 5722), and came from grave 1712 at Naḳādah. This grave was dated by Petrie to S.D. 42.
 - (3) A fine close zigzag of slightly curved vees, about 6 vees to 10 mm., on which have been incised pairs of straight lines sloping alternately up to right and to left occurs on the worn rim of a *red* incised flat-bottomed bowl decorated with a pattern intermediate between N 2 and N 6 (*Nagada and Ballas*, pl. 30). It is now in the Ashmolean Museum (registration No. 496-95), and comes from grave 1901 at Naḳādah.
 - (4) An irregular zigzag of slightly curved vees, varying from 5 to 9 vees in 20 mm., on which have been incised straight lines varying from 18 to 28 mm. in length, sloping up to the right, each line cutting through four to six vees of the original zigzag, occurs on the rounded rim of a coarse brownish black bowl with a flat bottom. This is now in University College (Catalogue No. 5723), and was published in *Nagada and Ballas*, pl. 30, 12. It came from Naḳādah grave 1615, which was dated by Petrie to S.D. 38.
 - (5) A fine close zigzag of slightly curved vees, 5-6 vees to 10 mm., on which have been incised straight lines varying from 32 to 38 mm. long, sloping up to the right and each cutting through 15 to 16 vees of the zigzag, occurs on the rim of a sherd from a flat-bottomed black-topped brown straight-sided bowl. It is now in University College (Catalogue No. 5376) and came from Naḳādah grave 1863. In this grave occurred a cylinder seal probably from Jemdet Nasr, and according to Petrie, *Prehistoric Egypt*, 40, there was at least one other incised sherd in this grave. I have not yet traced *Prehistoric Egypt Corpus* N 24 said to come from this grave, but N 26 (also said to come from it) is part of a similar black-topped brown incised bowl, now in the Ashmolean Museum (registration No. 503-95) and is marked as coming from grave 650, not 1863. Grave 1863 is dated by Petrie to S.D. 46.
 - (6) A fine close zigzag of almost straight lines, on which have been incised single straight lines about 30 mm. long sloping up to the right and cutting through about 12 vees, occurs on the rim of a flat-bottomed brownish black bowl with incised decoration published in *Nagada and Ballas*, pl. 30, N 2 and *Prehistoric*

Egypt Corpus, pl. 22, 2 N. This bowl is now in the Ashmolean Museum (registration No. 498-95), and comes from grave 259 at Nakādah, dated by Petrie to S.D. 51.

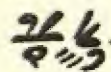
There can be no doubt that the rim decoration on these incised pots (five 'black' and one red) from the early Gerzean culture in Egypt is basically the same as the rim decoration found not infrequently on sherds of the Khartoum Neolithic period, five varieties of which from Esh-Shaheinab are shown in fig. 1. This is sufficient to prove that the 'Black Incised' ware (N) is not foreign to the Nile Valley but came from the Nile Valley south of Egypt, i.e. somewhere in the Sudan. It now falls to the Sudan Antiquities Service to find sites from which it came, and to show their relation to the Khartoum Neolithic. In the meanwhile the similarity between these rims may be held by Mrs. Baumgartel to indicate that the 'Khartoum Neolithic' (which has a number of features in common with the Fayyūm Neolithic) is not really neolithic, but Gerzean in date; but I do not think that this will turn out to be the case. Africa is notably conservative, and this rim decoration once invented may have been used there for centuries. (Pots from the protodynastic(?) burials at Esh-Shaheinab had a fine form of the rim decoration 30 or 33, see fig. 1, though a wide straight zigzag was no longer imposed on it.)

Maceheads typical of the Gerzean culture do not occur in the Khartoum Neolithic, though fragments of disk maceheads such as occur in the Amratian have been found on Khartoum Neolithic sites, and may come from the end of that culture. (In fact I sometimes wonder whether they came from weapons of Amratian raiders who sacked the settlements of the Khartoum Neolithic people, thus explaining why a once flourishing culture came to an end.) Also the patterns on the 'Black Incised' ware are more elaborate than those on the Khartoum Neolithic pottery, and more closely related to some that occur in the protodynastic(?) pottery of Khartoum, see especially *Early Khartoum*, pl. 93, figs. 5 and 6. Further, all the six Black Incised vessels described above had flat bases, and a flat base is typologically later than a round base. All Khartoum Neolithic bases were round.

To complete the picture I may mention that fragments of black (and brown) 'incised' saucers similar in a general way to the Black Incised saucer of Sequence Date 33 from Diospolis Parva (see *Prehistoric Egypt Corpus*, pl. 27, 55) have been found in the Khartoum area (see *Early Khartoum*, p. 93 and pl. 89), although the actual pattern impressed on the saucer from Diospolis has not turned up yet.

SOME NOTES ON THE READING OF THE GROUP

By E. JELÍNKOVÁ-REYMOND

A NUMBER of demotic documents dating from the Ptolemaic age preserve the texts of the "Rules" of religious associations. They present several examples of an interesting group: . The meaning of the word represented by this group is clearly revealed by the context; it was used to write the term 'Religious Association'. Its reading, however, raises some difficulties.

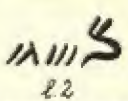
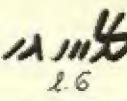
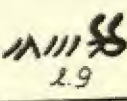
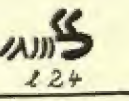
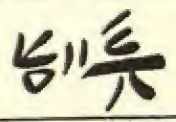
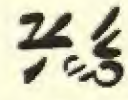
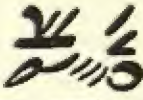
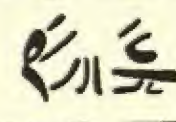
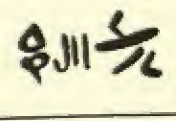
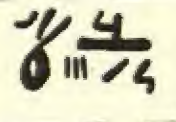
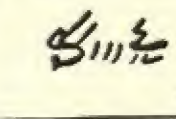

1°	P. Lille 29	 l. 2 ;  l. 6 ;  l. 9 ;  l. 24
2°	P. Berlin 3115	 = 2, 11, 14; 3, 10; 4, 1, 2, 3, 4; 6, 1, 3, 6, 12.
3°	P. Caire 31178	 l. 3 ; 
4°	P. Caire 30606	 l. 22.
5°	P. Caire 30605	 l. 3
6°	P. Caire 31179	 l. 4
7°	P. Caire 30619	 l. 3

FIG. 1


Spiegelberg read the aforesaid group at first as *sisnt*. He observes in his notes to the transliteration of P. Cairo 30605¹ that this writing is to be distinguished from the group


¹ Cf. Spiegelberg, CCG II, Texte, p. 19, n. 1.

usually employed in the demotic texts for the word *knbt* = 'council', 'assembly' and that it should be transcribed  *sisnt*. But later on the same author, in his study of a monument belonging to the religious association of Denderah,¹ changed his opinion on this question. He returned to the reading *knbt* in spite of the similarity between the writing on the stela of Denderah and that in the aforementioned papyri.

Sethe, on the other hand, thinks, as he explained in his comment on a passage of P. Berlin 3115,² that the reading *sisnt* is the only one admissible. The fact that the first element of this group resembles the demotic writing for *6-nt*, he considers as a proof of this.

The question which now presents itself is: which of the two previously proposed readings is the more probable in the light of all the instances of this writing which are known to us at present. The examples provided by the 'Rules' permit of some hesitation between the two readings, as may be seen from fig. 1:

In examples 2-5, it seems to me that the reading *sisnt* is admissible. The first element of the quoted writings  is the same as the demotic form for *6*.³ But in 1 and 6, such an interpretation seems less likely and the form in 7 seems to eliminate the possibility of such a reading altogether; this last, if my interpretation is correct, points specifically to the reading *knbt*.

The question of the reading is further complicated by other examples of the word for 'religious association' which occur in P. Cairo 30605. 30606. 31179. We find in these texts a different, more explicit, writing used to express the same term: 

= P. Cairo 30605, I. 13, 16; 30606, I. 13, 16; 31179, I. 15. Its resemblance to the hieratic writing of *knbt* is evident,⁴ so that we may consider this palaeographical relationship as a proof that the term 'religious association' is to be read *knbt*. But perhaps these two writings, although palaeographically distinct and employed in the same document, are identical as to their reading? Their use seems, at first, to depend on the context, where in one place the first mentioned group is used, i.e. in the title of the 'Rules', and in another the second and more explicit writing, i.e. in the phrase: *mtw-n dy ph-f r t: knbt* 'And we shall cause him to attain to the Association'.⁵ This difference in usage permits us to imagine that there must be two terms, different as to their reading but having the same meaning. Such an explanation, possible for the three above mentioned documents, would be inapplicable to the examples drawn from the P. Lille 29 and P. Berlin 3115. The scribe, in both documents, has used only one writing without regard to the context. Finally, the form which occurs in the title of the 'Rules' of P. Cairo 30619 (cf. no. 7) makes such an interpretation impossible and brings us again to the reading *knbt* previously proposed.



The occurrences of the word for 'religious association' in texts other than the 'Rules' are unfortunately rare. The number known at present is not sufficient to solve definitely

¹ Cf. Spiegelberg, *ZAS* 50, 37.


² Sethe-Partsch, *Dem. Urk. zum äg. Bürgerrechtsrechte*, *ASAW* 32, pp. 458-9.

³ Cf. Griffith, *Ryl. Pap.* III, 416.

⁴ Cf. Spiegelberg, *Rec. trav.* 16, 24.

⁵ *knbt* here means surely 'religious association' according to P. Berlin 3115, col. 6, ll. 6-7; this example shows the determinative  instead of , in the three quoted instances.

the problem of their reading. But it seems to me nevertheless necessary to present them, for they provide some useful suggestions for the explanation of the above-mentioned group and its possible origin.

1. The form which occurs in a private judicial document from the reign of Ptolemy XI Alexander I, P. Cairo 50126, ll. 5.6,¹ is similar to the more explicit writing of our documents: ; (cf. no. 4.5.6).
2. The writing of the word for 'Association' known from P. Berlin 3115 reappears in the texts preserved on three stelae: Cairo 31130;² Cairo 50024;³ and a stela from

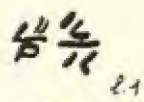
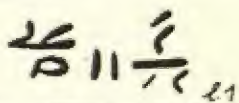
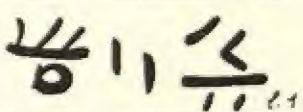
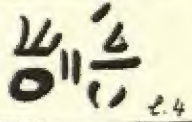
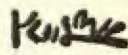

Le Caire 31130	 l. 1
Le Caire 50024	 l. 1
ZÄS. 50 (1912), 37	 l. 1 ;  l. 4

FIG. 2

Denderah.⁴ They commemorate religious foundations made by these corporations and date from the Roman period (fig. 2).

3. Finally, we find in the graffiti of Dodecaschoenos⁵ the two following writings used simultaneously; they can be interpreted sometimes as *sisnt* and sometimes as *knbt* (fig. 3).

Here we must call particular attention to no. 4, which resembles the writing for *knbt* = 'document', 'deed'⁶ and is comparable above all to an example of the latter in P. Brit. Mus. 10591, l. 15:⁷ 

We come now to the final question; how can we justify the vacillation between these two writings, apparently different, but seeming to be correlative in their use. If we call attention to the first form of the said group and if we compare it with the more explicit writing, we must imagine a dissociation of the elements forming the group . A comparison of examples no. 1 and nos. 2-6 seems to corroborate this hypothesis: (a) no. 1 (reign of Ptolemy III Euergetes) is an earlier stage which preceded the complete dissociation of the elements forming the first sign of this group; (b) no. 6 (reign of Ptolemy VI Philometer), the first element of which is similar to an example

¹ Spiegelberg, *CCG* III, pl. 53, pp. 88-89.

² Ibid., III, pl. 1, p. 2.


³ Griffith, *Cat. of the demotic Graffiti of the Dodecaschoenos*, Oxford, 1937.

⁶ Cf. Griffith, *Ryl. Pap.* III, 398.

² Ibid., I, pl. 13, p. 51.

⁴ Spiegelberg, *ZÄS* 50, 36 ff.

⁷ Cf. Thompson, *A Family Archive of Siut*, pl. 10, l. 15.

of *knbt* 'assembly' in P. Bibl. Nat. no. 215, vs., a, ll. 8. 9. 12: ;¹ (c) and finally No. 5 (reign of Ptolemy VI Philometer) may be considered as a simplified form of the aforesaid group.

It results from this short study that the reading *knbt* which we propose for the term 'religious association' seems the most probable according to the evidence at present available. The group here discussed, which is peculiar to the documents dating from the reign of Ptolemy VI Philometer (see fig. 1, nos. 2-6), must be a derivative writing

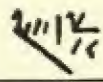
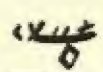
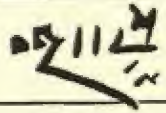
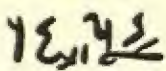
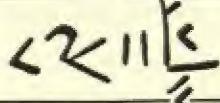
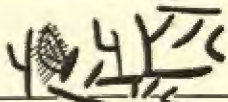
1°	<i>Zab.</i> , 30,5	
2°	<i>Zab.</i> , 15,4	
3°	<i>Phil.</i> , 260	
4°	<i>Phil.</i> , 244,3	
5°	<i>Phil.</i> , 36,5	
6°	<i>Phil.</i> , 443,1	

FIG. 3

of the normal one, resulting from the hieratic writing of *knbt* and representing its latest stage of development. Finally, we must quote an argument 'ab externo' which goes to confirm the reading *knbt*. The instances of the word for 'religious association' here studied date from the late period; among all of them, the examples drawn from the stelae² in particular never reveal the presence of the consonant — s,³ so that the reading *sisnt* is to be eliminated until proof to the opposite is forthcoming.

¹ Cf. Spiegelberg, *Die sogenannte Demotische Chronik*, pl. 6.

² Cf. *supra*, fig. 2.

³ Cf. e.g. the late writing of the word *hust* = necropolis; cf. Griffith, *Cat. Dodecasch.*, p. 171, no. 267.

A HADRA-VASE IN THE ASHMOLEAN MUSEUM

By T. RÖNNE AND P. M. FRASER¹

THE vase here published was presented to the Ashmolean Museum in 1920 by the late Dr. J. G. Milne. Its previous history is recorded in a letter written by him to Professor Evaristo Breccia, which was published by the latter in *Bull. Soc. Arch. Alex.* N.S. 4, 31. It was bought by him from a private collection formed at Ramleh. No indication is given of its precise provenance among the many necropoleis east of the ancient city of Alexandria, but the inscription on it provides a strong presumption that it is from the main Hadra-group, rather than from Hadra-on-Sea or Chatby.² In his letter to Breccia Milne gave an incomplete transcript of the text on the body of the vase, and omitted any reference to the undamaged inscription on the bottom, while of the vase itself he said only that it was 'a hydria with typical black decoration'. In these circumstances a complete publication of the vase may be welcome, especially since, although the vase itself is hardly spectacular, the inscription is of considerable interest.³

I. The Vase (plate V)

Measurements: ht. 0.445 m.; max. diam. 0.246 m.

Preservation: complete; glaze flaked in places.

Shape: hydria. Mouth straight. Neck set off from body. Moderately slender ovoid body tapering to a high, narrow base which flares out to a broad foot. Flat, corrugated vertical handle from middle of neck to shoulder. At junction with lip an undulating cross-piece. Horizontal handles round in section and curving slightly upwards.

The decoration is applied directly on the natural clay in blackish-brown glaze.

Black circle round edge, and on underside, of lip. On top of lip small radiating stripes. Inside of neck painted black at top. Foot and base to junction with body black, save for reserved ring round foot with radiating black stripes. Transverse stripes on handles.

Round neck wreath of two laurel branches, beginning at vertical handle and uniting in small ring in front. At junction of neck and shoulder narrow band and circle of dots. Round base of shoulder wave-border. Below this, where shoulder joins body, one wide and one narrow band. Round middle of body wide band between two narrow circles. Above both horizontal handles two sprays with double stems. On either side of handles vertical border of chevrons between lines. Two panels, one in front and one at back, are thus formed. The main panel, in front, is divided in two by a horizontal line. In

¹ Part I is by Miss Rönne, Part II by Mr. Fraser.

² See below, p. 86.

³ Milne, loc. cit., published the inscription as — — *ου Δημητρίου Χίου*, and it reappeared in the same form as SB 6226. The entry in Launey's *Recherches*, II, 1151, s.v. *Χίοι*, which gives the same text, should, of course, be deleted, now that it is clear that the ashes are those of a *πρεσβευτής*.



A HADRA-VASE IN THE ASHMOLEAN MUSEUM

the upper, slightly narrower, zone a formal scroll with small bell-like flowers runs from a sort of calyx on the left. In the zone below, two branches meeting in a circle, like those on the neck. In back panel, palmette pendant below vertical handle, with out-turned leaves drawn in outline, and scroll on either side.

Hadra-vases can be divided into two classes according to the manner of their decoration. In one class polychrome decoration is painted on a white coating, while in the other more numerous class, to which our hydria belongs, the decoration is painted with blackish-brown glaze directly on the natural yellow, or pink clay.¹ The technique is usually poor both in regard to decoration and to shape, in which there is considerable variation.² We are not here concerned with the first group, since our vase, like all the other dated ones, belongs to the second class. Its shape, an ovoid body on a high narrow base, is typical of the dated vases.³ Circles and vertical borders divide the vases into zones and panels, of which the panel on the front of the body is often again divided into two, and contains the main decoration. The motifs sometimes consist of figures such as animals, hunting-scenes, or combat,⁴ but more frequently are designs like those on our vase—branches and scrolls, palmettes, geometric patterns, and so on.⁵

On the whole, the decoration of this class of vase is too hasty and too standardized to enable one either to discern different painters' hands or to trace an evolution in style.⁶ The Ashmolean vase is, in fact, typical of its class, and calls, in this respect, for no further comment.

The Hadra-vases, though found occasionally outside Alexandria, are mainly confined to it, and are undoubtedly a local product. The kind of black-figure decoration found on them occurs quite often in the Hellenistic period, for example in South Italy, Cyprus and South Russia.⁷ It has certain affinities with that found on the Boeotian Kabirion ware⁸ of the classic age, and many attempts have been made to explain the black-figure Hadra-class as a continuation of the Kabirion pottery.⁹ But since the latest investigations have shown that the end of the Kabirion ware may be as early as about

¹ Pfuhl, *MuZ* 11, § 1000, 912 ff., figs. 757-60; Breccia, *La Necropoli di Sciatbi*, 25 ff., pls. 37-42; Pagenstecher, *Sieglin Exped.* 11, 3, 33 ff., pls. 14 ff. A good short survey is in Breccia, *Alexandria ad Aegyptum*, Eng. ed., 221 ff. The black-figured class is treated by Pagenstecher, *AJA* 13, 387 ff., pls. 9-12, and *Bull. Soc. Arch. Alex.* 14, 229 ff., but his conclusions are no longer acceptable. For further bibliography see now A. Rumpf, *Malerei u. Zeichnung*, 1953, p. 154, n. 1.

² See, for example, those reproduced in Breccia, *op. cit.*, pls. 38-42, and Pagenstecher, *Sieglin Exped.* 11, 3, 35.

³ So in the series discussed by Pagenstecher, *AJA*, loc. cit., the largest collection of photographs of Hadra vases (sixteen) so far published (all inscribed); another good published series (twelve vases) is that at Toronto: D. M. Robinson, etc., *Greek Vases Toronto*, pls. 96-8 (none of these are inscribed: see *ibid.* vol. I, 265 ff.).

⁴ Pagenstecher, *Sieglin Exped.* 11, 3, 41 ff.

⁵ *Ibid.* 38 ff.

⁶ *Ibid.*, 37, Pagenstecher retracts his attempt, made in *AJA*, loc. cit., to establish a typological series. The dating of the inscribed vases to the later part of the third century (instead of to the earlier part) lends no assistance to his argument.

⁷ Pagenstecher, *AJA*, loc. cit. 387 ff.; *id.* *Bull. Soc. Arch. Alex.* 14, 229 ff., with the literature there cited (I have not had access to the Russian literature quoted by him); *id.* *Sieglin Exped.* 11, 3, 32 ff.; Pfuhl, *MuZ*, 11, §§ 996 ff. For Etruscan 'floral black-figure' see Beazley, *Etruscan Vase Painting*, 181 ff.

⁸ See especially Wolters-Bruns, *Das Kabirenheiligtum bei Theben*, 1, 1940, 95 ff., with the earlier literature.

⁹ See, e.g., Pagenstecher, *op. cit.*

400 B.C.,¹ and the Hadra vases are evidently to be dated to the middle and later part of the third century,² it is impossible to establish a direct connexion between the two. The black-figure pottery of the fourth century found on sites in Boeotia and adjacent regions³ has also been suggested as the forerunner of the Hadra vases,⁴ and the allegedly close connexions, both cultural and political, between Boeotia and Alexandria in the early Hellenistic period, might seem to lend support to such a hypothesis.⁵ The occurrence, however, of similar kinds of decoration in many places other than Alexandria, in the Hellenistic period, makes it more likely that Alexandrian potters did not depend in this matter exclusively on Boeotia, but played their part in the general development in vase-painting in this period.⁶

II. The Inscriptions

(a) On the body of the vase in black ink:

[N]ΙΚΟΣΤΡΑΤ[Τ]ΟΥ [Τ]ΟΥ ΔΗΜΗΤΡΙΟΥ ΧΙΟΥ
[Π]ΡΕΣΒΕΥΤΟΥ ἔτους ιγ, μηνὸς
- - - - ρυ

(considerably lower) [διὰ τοῦ δεῖνος] ἀγοραστ[οῦ].

(b) Under the foot of the vase in black ink, inscribed in a circular clockwise direction, three concentric circles of writing, in a different hand:

ΝΙΚΟΣΤΡΑΤΟΥ ΤΟΥ ΔΗΜΗΤΡΙΟΥ ΧΙΟΥ | ΠΡΕΣΒΕΥΤΟΥ, ἔτους ιγ, | μηνὸς | Χοιὰκ | κγ.

The inscription belongs to the well-known group of dated inscriptions on Hadra-vases, which have been studied repeatedly by archaeologists and historians alike, since the first and largest collection of them (now in New York) was published by A. C. Merriam in 1885.⁷ Since full, or almost full, lists of these dated inscriptions have been given by Pagenstecher,⁸ Breccia,⁹ and, very recently, by H. Braunert,¹⁰ it is not necessary

¹ Wolters-Bruns, op. cit. 124 ff.

² See below, p. 90.

³ P. N. Ure, *Black Glaze Pottery from Rhitsona in Boeotia*, 24 ff.; A. D. Ure, *JHS* 46, 54 ff.; *BSA* 41, 22 ff.; *Hesperia*, 15, 27 ff.

⁴ See G. Kleiner, *Tanagrafiguren* (*JDAI*, Ergh. 15, 1942), 43 ff.

⁵ P. Wolters, *Ath. Mitt.* 55, 210 ff.; Kleiner, loc. cit.

⁶ Pagenstecher, *AJA* 13, loc. cit., and in *Sieglin Exped.* II, 3, p. 41, explains it as a syncretism of influences from various parts of the Hellenistic world; cf. also Pfuhl, op. cit. §§ 996 ff., and Rostowzew, in Pagenstecher, *Sieglin Exped.* II, 3, p. 33.

⁷ Merriam, *AJA* 1, 18-33. The other important early publication is that of A. Néroutzos, *L'Ancienne Alexandrie*, 102 ff. (cf. below, p. 87, n. 1). The most important subsequent discussions of the subject are those noticed in p. 89, nn. 1 and 6.

⁸ Pagenstecher, *AJA* 13, 387-416, pls. 9-12 (sixteen vases reproduced). This article still contains material of value, but its list of inscriptions is superseded by the lists of Breccia and Braunert (see nn. 9, 10 below).

⁹ Breccia, *Iscr.* pp. ix-xvii. The list is on pp. xvi-xvii. I refer to this list as Brec.

¹⁰ Braunert, *JDAI* 65/66, 231-63. The list (from which the vase here published is omitted) is on pp. 234-7. I refer to it as Brau. It supersedes the previous lists for most purposes. The rest of the article attempts once more to determine the historical context of the inscriptions. The long discussion of the Alexandrian necropoleis by G. Kleiner, *Tanagrafiguren* (cf. above, n. 4), 26 ff., contains many conjectures, some probable, some not, which I cannot discuss here.

to give another here. This is the first published instance in which the inscription under the foot of the vase corresponds so closely to that on the body.¹

The inscription adds one more to the number which record the date of death of a *πρεσβευτής* or *θεωρός*. All these appear to have come from the main necropolis of Hadra, while the nearby necropolis of Hadra-on-Sea (actually situated on the hill Ibramieh above the sea) seems only to have yielded funerary urns of mercenaries and mercenary leaders.² Similarly Hadra-vases from the other main eastern necropoleis of the city, Muṣṭafa Pasha³ and Chatby,⁴ and from the western ones of Kôm esh-Shukāfa and Gabbari,⁵ have either simply been inscribed with the name of the deceased or left uninscribed. There is, then, no need to doubt that our vase comes from the first-named necropolis, the contents of which are all of the Ptolemaic period.

From a comparison of the inscription on our vase with that of the other Hadra-vases so inscribed it will be seen that it clearly belongs to the same group, and falls within the same general criteria of dating and historical interpretation. A brief survey of the main problems is therefore necessary.

Those vases of the Hadra-group with which we are concerned contain the ashes of persons designated simply by their name and ethnic, or by their name and ethnic to which is added a title: *πρεσβευτής* or *θεωρός*, or (twice) *ἀρχιθέωρος*.⁶ The deposition of the ashes seems to have been the responsibility of officials who in most instances bear no title, the office being simply expressed by *διὰ* followed by the genitive of the agent, as, for example, *διὰ Σαραπίωνος* or *διὰ Φίλωνος*, although one such official, Theodotus, appears on several vases (including, it appears, that here published), though not invariably, with the word *ἀγοραστής* added, apparently indicating the office held by him.⁷

¹ There may be many such inscriptions unnoticed under the feet of vases, published and unpublished. The other recorded specimens known to me are: (a) Brec. 15 = Brau. 10: (1) on the neck *ΙΑ*; (2) under the foot *Θαρσυφᾶς | θεωρός Κρής | Ἀπολλώνιος | διὰ Σαραπίωνος*, *ΛΙΔ Ἀπε[λλαίου]*. Here there is no evident connexion between (1) and (2), the former probably belonging to a later re-use, the original inscription on the body (still preserved on the base) having been erased by time or the hand of man. There is also the possibility that the first group represents an index-number of the loculus to which the vase belonged (cf. Schreiber, *Sieglin Exped.* 1, 192-93). (b) Brec. 21 = Brau. 16 (*OGIS*, 37): (1) on the body *ἔτους ἑνὸς καὶ εἰκοστοῦ, μηνὸς Λαίου | διὰ Σαραπίωνος Ἱερωνίδης Λάμπωνος | Φωκαεὺς ἀρχιθέωρος*; (2) on the neck: *ΕΤ*; (3) under the foot *ἀρχι* (in monogram). (c) (undated). Merriam, *op. cit.* no. 10 = Néroutzos, *op. cit.*, p. 114, no. 4: (1) on the body: *Ἀπολλοδώρου | τοῦ Λυσίου | Μάρωνος*, (2) under the foot: *δεῖσαι θεμιδᾶ*, translated by Néroutzos 'qu'on ait peur de la justice', though *θεμιδᾶ* is an impossible form. Here, as so often with regard to the inscriptions on Hadra-vases, one cannot help doubting the reading.

² This point, clear from the indications given by Néroutzos, *op. cit.*, pp. 102, 110-11, is well emphasized by Braunert, *op. cit.*, 233. Breccia, *Alex. ad Aegyptum*, Eng. ed., pp. 87-88, followed by Kleiner, *op. cit.*, p. 35, with note *3 on p. 277, confuses the matter by supposing that the urns both of the mercenaries and of the envoys came from Ibramieh, the hill above Hadra-on-Sea, from which in fact only the former came.

³ Adriani, *Annuaire du Musée*, 1933/34-34/35, 142-3 (cf. Kleiner, *op. cit.* 36-37).

⁴ See Breccia, *La Necropoli di Sciatbi*, 25 ff.

⁵ See Schreiber in *Sieglin Exped.* 1, 'Die Nekropole von Kôm-esch-Schukāfa', 192 f.

⁶ For the two *ἀρχιθέωροι* see Brec. 21 = Brau. 16 and Brec. 6 = Brau. 23.

⁷ Only Theodotus is called *ἀγοραστής*. The title is applied to him five times, and he occurs once without it (Brec. 1 = Brau. 20). Since our vase has the word *ἀγοραστ[οῦ]* we should probably supply [*διὰ Θεοδότου*]. If so, it will be the latest record of Theodotus' activity. The word *ἀγοραστής* is a considerable puzzle. The term occurs (other than in its literal meaning of 'buyer', in which sense it is common at all times) in Xenophon, *Mem.* 1, 5, 2, with the meaning of a house-steward, and Merriam, *op. cit.*, pp. 32-33, derived the usage on the vases from this significance of the word, and in this he has been followed by most scholars. It is, however,

The urns contain, then, the ashes of various envoys and theoroi who died while on visits to Alexandria.¹ It appears that the state retained the main Hadra-Necropolis for the reception of the remains of these distinguished foreigners; and, though the incidence of death among them seems high, there is no reason to doubt that the envoys were only temporarily resident in the city, or to suppose that the titles *πρεσβευτής* and *θεωρός* were conferred on permanent foreign residents, or that a man, having once been a *πρεσβευτής*, retained the rank as a title, though obviously, were one or other of these alternatives correct, the incidence of death would be less remarkable. The political implications to be read into the presence of these persons in Alexandria must remain in most instances uncertain, and we shall be well-advised in general to regard any proposed link with known events with suspicion, although, notwithstanding this general warning, there exist good grounds for believing that in the present instance a link exists.

The main discussion in regard to the vases and the inscriptions has been concerned with the dates recorded on them. No other means of determining the chronology of the vases exist since they show no stylistic development,² and the necropolis is dated

difficult to understand how such a person would be responsible for the burial of foreigners. If, on the other hand, the word be understood in the general sense of 'overseer', it is very strange that in the vast number of papyri concerned in one way or another with the administration of Ptolemaic Egypt (none of which were available when Merriam wrote) there is no mention of such a person. The suggestion of Oertel, in Braunert, *op. cit.*, p. 238, n. 2, that the *ἀγοραστής* may have been a sort of 'secretary for overseas-trade', who by this means acquired numerous contacts with the outside world, and was consequently given the responsibility of disposing of the remains of distinguished foreigners, would explain what is otherwise obscure, namely how an official *with this title* came to be involved in the business. But the absence of any reference to such an official in the papyri, many of which (particularly the Zenon papyri) are concerned with the importation of goods from abroad, seems strongly against it. In fact there appears to be not a single instance of the term in the present sense in Ptolemaic papyri at all (Braunert, *op. cit.*, p. 239, n. 4, says that the term is used in this sense in *PTeb.* 769, line 23, *οἱ τῶν φορτίων ἀγορασταὶ* [. . .] *οἱ ἐκ τῶν* ---, but there seems no reason to doubt that the meaning here is the normal sense of the word, 'buyer'). The word is, however, seemingly found in this sense in the third century A.D., in a passage in the accounts of the temple of Jupiter Capitolinus in Arsinoe, *BGU* 362, ix, lines 17 ff., and attention was drawn to this by Wilcken in his original publication of the accounts, *Hermes*, 20, 473: 'Das Wort muss hier — und überhaupt, wie es scheint, im ägyptisch-griechischen Dialekt — vielmehr eine allgemeinere Bedeutung, etwa 'Geschäftsführer, Geschäftsvermittler' gehabt haben, wie auch in den jüngst bekannt gewordenen alexandrinischen Vaseninschriften der *ἀγοραστής Θεόδοτος*, eine ähnliche, vom gewöhnlichen Sprachgebrauch abweichende, Interpretation verlangt.'

The difficulty of the above solutions is that none explains why a Ptolemaic administrative official, responsible for burial, should bear this name. A further suggestion, made and rejected by Merriam, *op. cit.*, p. 32, n. 1, and since ignored by all, should consequently perhaps be rescued from oblivion: namely, that *ἀγοραστής* is the patronymic. I see nothing impossible in this; it is true that the agent of the burial in no other instance has the patronymic, but a hard and fast rule in such a matter is unlikely. It is possible that in the course of time Theodotus found it necessary to distinguish himself from another Theodotus employed in the same service. The name *Ἀγοραστής* I have not met, but *Ἀγοραστός* (which is equally possible, since the word occurs only in the genitive *ἀγοραστοῦ* on the vases) is met at a later date in Lycia and Pisidia (see the indices of *TAM*, ii and iii). The name should denote servile status (for it, and similar slave-names, see Lambert, *Die griech. Sklavennamen*, i (57 Jahresbericht über das k. k. Staatsgymnasium im viii Bezirk Wiens, für das Schuljahr 1906-7), pp. 45-6), and there is no reason why the task of burying the dead should not have been given to a responsible son of a slave or a freedman, himself not of servile status.

¹ It should be pointed out that *πρεσβευτής* is sometimes found in the sense of *θεωρός* (see Boesch, *ΘΕΩΡΟΣ*, 7-11). But it seems natural here to observe the distinction of the vases themselves and regard the *θεωρός* as 'Festbesucher' or 'Festverkünder', and the *πρεσβευτής* as concerned with secular matters.

² See above, p. 85.

by the inscriptions on the vases and not the latter by the former.¹ The dates, twenty-seven in all, range from a year δ (4)² to a year σλ (36),³ with no indication of the king or kings to whom the regnal years refer, and a considerable range of dates has been proposed. It is clear that the vases form a relatively restricted group, and an assured date for one would greatly simplify the dating of the rest. The main effort of scholars has therefore been directed towards securing the date of the two vases belonging to the same year, 9, one of which bears an Egyptian as well as a Macedonian month,⁴ and the other of which, bearing only a Macedonian month, contains the information that the dead person, a Delphian, came as θεωρός τὰ Σωτήρια ἐπανγέλλων.⁵ This is not the place to record all the various interpretations put upon these two dipinti. In general, earlier scholars dated the second vase to the ninth year of Philadelphus, on various grounds and particularly because the Soteria were identified with the first celebration of that festival after the Gaulish invasion of Greece in 279.⁶ More recently, however, particularly as a result of valuable research by Beloch,⁷ the significance of the double-dating on the other vase has been appreciated,⁸ and the Soteria have rightly lost their primacy as a means of establishing the date, since it is clear that the particular celebration of the festival cannot be identified.⁹ The double-dating provides seemingly incontrovertible evidence in favour of a date late in the century. The system of dating by the Egyptian as well as the Macedonian month in purely Greek documents such as the present one, in Alexandria and the royal chancery, arose from the gradual pressure exercised by the Egyptian element in the population, which probably reached its climax in the reign of Philopator,¹⁰ and it is improbable that a document commemorating

¹ No excavation reports of the early finds of the dated vases survive, and in the nature of things no precise dates on stylistic grounds can be inferred from the furniture of ordinary tombs. The question of the dating of the Hadra finds affects the chronology of almost all the other Alexandrian necropoleis of the pre-Roman period. Breccia, *La Necropoli di Sciabbi*, xlvii ff. (cf. *ibid.* 27), claims to be able to establish an independent date for the two subterranean tombs there which have klinai in them, but his measuring-stick is the similar Euboean tomb, published by Vollmoeller, *Ath. Mitt.* 26, 333 ff., which Breccia dates (with Vollmoeller) to the time of Alexander the Great. But the only indication of date in that tomb is the lettering of the inscriptions (*IG* XII, 9, 723 and add.), none of which, to judge from the sketches made of them, appear to be earlier than the early third century (see *Ath. Mitt.* pl. xiii-xiv). Adriani, *Annuaire du Musée* 1933/4-34/5, 173 ff. (cf. also *ibid.* 1940-50 (1952), 115) gives other reasons for adopting a third-century date for the Chatby tombs, which would then be contemporary with the Hadra-necropoleis. Kleiner, *Tanagrafiguren*, 31-33, also argues for a date not before 300 B.C. The absence of Hadra-vases at Aboukir was one of several reasons adduced by Watzinger, *Griech. Holzark.* 10-11, for dating the graves there to the fourth century (Breccia, *op. cit.*, p. 28, n. 1, denies the validity of this argument, which inevitably clashes with his view that the Hadra-vases are shown by their presence at Chatby to have originated in the time of Alexander).

² Brec. 3 = Brau. 3. ³ Brec. 26 = Brau. 2. ⁴ Brec. 13 = Brau. 25. ⁵ Brec. 14 = Brau. 26.

⁶ See the general discussion of the earlier views given by Breccia, *Ischr.* pp. ix ff. The early date was proposed by Merriam, and accepted by, amongst others, Wilcken, Strack, Dittenberger, Pomtow, and Breccia. A later date was urged by Néroutzos, Boesch, and Beloch (in the first edition of his *Griechische Geschichte*). The arguments advanced by these scholars are discussed by Breccia, and since they are antiquated by the advance in knowledge regarding the Ptolemaic calendar, they need not be further discussed here.

⁷ Beloch, *Archiv*, 7, 161-74; *Griech. Gesch.*² IV, 2, pp. 29 ff.; *Archiv*, 8, 1-10.

⁸ See, in addition to the works of Beloch, H. Frank, *Archiv*, 11, 44-45, and the works there cited.

⁹ It is thus now generally accepted that the Soteria either are the penteteric Soteria of 214, or the annual Soteria of 212, according to whether the Macedonian year is to be regarded as the regnal or the financial one: see Ferguson, *Athenian Tribal Cycles*, 132-6.

¹⁰ On this see Braunert, *op. cit.*, 240 ff.

the death in Alexandria of an envoy from a Greek city would be recorded by the Egyptian month as well as the Macedonian month in the first half of the century. Moreover, the vase with double-dating, of year 9, cannot be of the reign of Euergetes, since the Canopus-decree, dated to Euergetes' ninth year, provides a quite incompatible calendar equation.¹ We may, then, accept the view of most modern scholars, and regard the ninth year of the vase with the double-dating as the ninth year of Philopator (214/213 B.C.).² An even later date, in the ninth regnal year of Epiphanes or Philometor, is most unlikely on general historical grounds. On this system, the remaining dates are not hard to determine. Some regnal years, (27 and 36), can only belong to the reign of Philadelphus, since neither Euergetes I nor Philopator reigned the necessary number of years. The main bulk of the vases bear regnal years which are possible for all three reigns, Philadelphus, Euergetes, or Philopator. The most likely interpretation seems to be that the two highest numbers refer to the reign of Philadelphus, and that the main group belong either to Euergetes or to Philopator. As between these two the former reign is ruled out at least for the vases of year 9, which must be that of Philopator, and it is a reasonable assumption, borne out by the introduction of the title *ἀγοραστής* in a number of vases including those of year 9, that we should assign the majority to the reign of Philopator.³

This view, that the main body of the vases are of the reigns of Euergetes I and Philopator, is borne out by a consideration hitherto insufficiently examined, namely, that of the palaeography of the inscriptions.⁴ A complete analysis of the material along these lines is not possible, since the inscriptions on many vases are still inadequately published, but it should be possible to reach some tentative conclusions. Naturally, the styles of writing on the vases differ widely and not all the differentiae are significant, but there can be no doubt that there are differences due to the date of the hand. The hands are semi-cursive and applied in black ink,⁵ and therefore, save in the actual material in which they are executed, closely parallel to the less cursive among the hands

¹ The equation of the Hadra-vase is 'Υπερβερεταίου λ, Φαρμούθι ζ, that of the Canopus decree (*OGIS*, 56, line 3) Ἀπελλαίου ἐβδόμη, Τυβὶ ἐπτακαίδεκάτη. The incompatibility of these two dates within one year is clearly recognized by Beloch, *Griech. Gesch.*² IV, 2, pp. 494-5; Ferguson, *op. cit.* 132-3; Frank, *Archiv*, II, 44-45; Dinsmoor, *Athenian Archon List in the Light of Recent Discoveries*, 123-5. I am grateful to Mr. T. C. Skeat for the following detailed statement regarding the date of this vase: 'On palaeographical grounds the only reigns which come in for consideration are those of Euergetes I, Philopator and Epiphanes. Edgar's tables for Euergetes I (in *P. Mich. Zen.*, p. 57), which, so far as we can judge, are likely to be correct within a few days, show, in year 9, Hyperberetaios 30 = Choiak 2, a discrepancy of 4 months and 5 days from the equation on the vase. On the other hand, for Epiphanes' reign we have the reliable evidence of the Rosetta Stone, which gives the equation for year 9, of Xandikos 4 = 18 Mechir, from which we can deduce (see the table in Ernst Meyer, *Untersuchungen z. Chron. d. ersten Ptolemäer*, p. 87, pl. 5) that Hyperberetaios 30 = Thoth 6, a discrepancy of over 5 months from the equation on the vase. This is as good as proof that the vase dates from the reign of Philopator.'

² Flacelière, *Les Aitolien à Delphes*, p. 167, n. 1, says of the Soteria-vase: 'Les calculs par lesquels on veut dater cette urne funéraire sont trop incertains pour permettre des conclusions fermes', but this seems unnecessarily cautious.

³ So Braunert, *op. cit.* 239-40.

⁴ I am indebted to Mr. C. H. Roberts for discussing with me the palaeographical evidence.

⁵ Many other inscriptions on Hadra-vases are inscribed, but only one of those which have a date, namely, Brec. 7 = Brau. 22.

found in papyri. When Merriam published the main group of the vases in 1885, no third-century papyri had been discovered, and in their absence he pointed, rightly, to the only semi-cursive hand of this period available to him, a gold foundation-plaque of the reign of Euergetes I.¹ However, we now have for comparison with our vase the mass of papyri of the third century; for the reign of Philadelphus we have in particular the Zenon papyri and the contents of *PHibeh*, I, while for the reign of Euergetes the most valuable group is to be found in *PPetrie*, I. For the period from the end of the reign of Euergetes to the end of the century less relevant material survives. *PGurob*, which cover much of the reign of Philopator, should be of particular value, but those of which photographs have been published are largely in a more cursive hand, and are of little value for comparison with the hand of the vase.²

A comparison of the inscriptions on the Hadra-vases, and particularly the one here published, with dated papyri seems to show that they bear the greatest resemblance to the documents of the latter part of the third century, and but slight similarity to those of the reign of Philadelphus. This conclusion can best be controlled by a comparison of the particularly significant letters, the tau with long cross-piece and a hook at the left-hand end, the chi with a similar hook, the gamma with short vertical and long horizontal strokes, the nu with pronounced overlap of the oblique stroke to the left, and the eta with curved vertical strokes. These letter-forms, particularly noticeable in our inscription and in those of one or two other vases,³ occur in the later among the soldiers' wills from Crocodilopolis, of the reign of Euergetes I,⁴ and also in a document written in a very similar hand, of the third year of the reign of Epiphanes.⁵ A

¹ Merriam, *op. cit.* 31. The foundation-plaque is *OGIS*, 60. It is regrettable that Braunert has contented himself (p. 238) with repeating Merriam's reference, and has not resorted to the papyri. There are, of course, many more foundation-plaques available now, but as evidence they are far less valuable than the papyri, and it is not necessary to give details of them here. Breccia, *Iscr.*, p. xv, claims to establish a date early in the third century from a comparison of the painted inscriptions on the Alexandrian grave-stelae, but the date of these cannot be fixed independently of our vases, since they too are from the Hadra and the other Ptolemaic necropoleis (see Pagenstecher, *Nekropolis*, pp. 84-5), and the hands are less close to the Hadra-vase hands than are those of papyri. When Breccia, *ibid.*, says, 'Chiunque abbia pratica della paleografia dei papiri greci d'Egitto, riconoscerà che le forme delle lettere nelle nostre iscrizioni ci richiamano tutte alla prima metà del terzo secolo', he is surely wrong.

² The fragment of the mystery-ritual, *PGurob*, 1, is most akin of the Gurob papyri to the hand of our vase, but is undated.

³ Brec. 11 = Brau. 9 (photograph in Breccia, pl. 44, 104) of year 8; Brec. 13 = Brau. 25 (photograph in Pagenstecher, *AJA*, 13, pl. 12, no. 22 of year 9. The vase of Sotion, *θεωρός τὰ Σωτήρια ἐπαγγέλλων*, is reproduced *ibid.* no. 23, but the inscription is largely in shadow. Some of the features are also present in Brec. 8 = Brau. 6 (photograph in Breccia, pl. 43, 103; line-drawing, *ibid.*, p. 108, no. 189).

⁴ *PPetrie*, I, nos. xiv ff. (nos. xi-xii seem not to have these features; xiii and xxi, both of 237 B.C., have some of them); xix (225 B.C., a very close parallel); xx (also 225, and very close in style to xix).

⁵ *PTeb*. 8 (pl. 4). This seems to provide a nearer parallel to our vases than any other papyrus. The papyrus was dated on palaeographical grounds by the editors to the end of the third century, and they took the fourth year mentioned in it as being the fourth year of Epiphanes, 202/201 B.C. They connected the papyrus, which contains instructions concerning the gathering of taxes *εἰς τὸ δ (ēros)* from various regions including the Ptolemaic Thracian possessions, with the activity of Philip V in that area in 202 B.C. That this, the almost universally accepted date, is correct, seems to me very probable. It may be pointed out that Grenfell and Hunt hesitatingly restored the line 12, in which a certain Kallimedes is addressed, thus: *Καλλιμήδει τ()αν() καὶ συναπόσ(τευλον) τοὺς | ἀπὸ Κα(ρίας?)*. A Kallimedes, however, is referred to by Livy, xxxi, 16, 4, in his account

comparison with the hand of one of the two vases bearing the high regnal year shows that in it these characteristic features are absent.¹

On palaeographical grounds, then, our vase may be assigned to the thirteenth year either of Euergetes I (235/234) or of Philopator (210/209), or even perhaps of Epiphanes (193/192). The last date seems, however, excluded on other grounds. The active contacts with the outside world postulated by the presence of so many envoys from the Aegean world, and the Greek mercenaries, attested by the contemporary urns from Hadra-on-Sea, seem out of place in the rather isolated Egypt of the period after the Second Macedonian War. The reign of Philopator seems, on the other hand, wholly suitable. The use of the term ἀγοραστής, confined, so far as we know, to a single individual, Theodotus, forbids us to separate our vase by a long period from the two vases of year 9 already discussed, which certainly belong to the reign of Philopator. Furthermore, although our vase cannot claim to be a true example of double-dating, since the Egyptian month is found only on the bottom, and the Macedonian only on the belly, of the vase, the use of the Egyptian month in this manner well suits a date in this reign. Unfortunately the actual name of the Mace-

of Philip's operations in 200 (two years after the postulated date of the papyrus) against the Thracian possessions of Egypt as 'praefectus Ptolemaei' in the city of Ainos. If this is the same person as the Kallimedes of the papyrus, it seems likely that the passage in the papyrus in which Kallimedes is addressed should, like the preceding lines, be referred to Thrace, and that Kallimedes received these instructions during his command in that area, which ended in 200 with his surrender of Ainos to Philip (Livy, *ibid.*). That Kallimedes was, in fact, in the same region of the Ptolemaic empire as the previous addressee, namely, in the northern area, and not in Caria, seems strongly suggested by the use of the compound συναπόστ(ειλον), the prepositional element of which has hitherto been ignored. How the abbreviation κα should be resolved must remain uncertain. If the identity of the two Kallimedes be accepted, there can be little doubt that the papyrus must be referred to the fourth year of Epiphanes, since it is not likely that his command in the north lasted from the fourth year of Philopator until 200 B.C. Though I regard the appearance of two persons of the same name in the Ptolemaic service at the same time and probably in the same area as unlikely, and am prepared to accept the identification for this reason, it should be noted that the name Kallimedes is frequent in Ptolemaic Egypt.

The Kallimedes of Livy was evidently, like Epinikos, the Ptolemaic governor of Maroneia (L. Robert, *RÉG* 52, 492 f.; further bibliography in Bengtson, *Strategie*, III, 183, n. 1. Bengtson provides the only full account of Ptolemaic administration in the area), a local governor (of Ainos) rather than a strategos of the whole region like Hippomedon earlier in the century (*Syll.*¹ 502; cf. Bengtson, 178 ff.), and perhaps Aphrodisios, mentioned in the papyrus before Kallimedes (Bengtson, *ibid.*). For the Ptolemaic possession of Ainos the inscription published in part by Herzog, *Hermes*, 65, 468, and now republished in full by Herzog-Klaffenbach, *Asylieuren von Kos* (Berl. *Abh.* 1952 (1)), 18, in which Euergetes appears as suzerain, and which can be dated to 242 B.C., is of importance. I see no mention of it in Bengtson.

The only argument against the date in the reign of Epiphanes was that advanced by Beloch, *Griech. Gesch.*², IV, 2, 345, n. 1, who said: 'dem [i.e. the date 202/201] widersprechen die Erwähnung von Tributen aus den κατὰ Λέσβον καὶ Θράκην τόποις, denn die thrakischen Besitzungen der Ptolemaeer waren schon 202 von Philippos weggenommen. Die Urkunde muss demnach unter Philopator gesetzt werden.' But this is wrong. Philip's operations against the Ptolemaic possessions in Thrace did not begin until 200 (Liv. *loc. cit.*). In his eastward march of 202 he did not molest Ptolemaic possessions in that area; cf. Walbank, *Philip V*, 113-14; Magie, *JRS* 29, 32 ff.; id. *Roman Rule*, 750-1, n. 42 (the fact is established, and does not involve acceptance of the conclusion drawn from it by Magie).

In conclusion: the date of the papyrus need not worry us unduly for our present purpose, since the fourth year of Epiphanes, 202/201, is only eight years from the date of our vase one way, and the fourth year of Philopator (the only possible alternative), nine years the other way.

¹ Brec. 26 = Brau. 2 (line-drawing in Breccia, 111, no. 192). This vase is from the mercenaries' necropolis at Hadra-on-Sea (see above, p. 87, n. 2).

donian month cannot be determined,¹ and thus a valuable equation of the reign of Philopator is lost.²

Numerous attempts to identify the persons whose funerary urns have thus survived, and to determine the historical events which led to their presence in Alexandria, have been made with varying degrees of success.³ Although the presence of a *πρεσβευτής* (if not of a *θεωρός*) attests some degree of intercourse between Alexandria and the state which the *πρεσβευτής* represented,⁴ the only wholly satisfactory way of establishing an identity or a connexion with a given event is when the date on the vase corresponds with a date established independently. Our vase is particularly kindly in this respect. Providing us with a specific date, it provides us thereby with an admirable historical background for the presence of Nicostratus the Chian in Alexandria.

The course of both the Social War, between Philip V and Aetolia, and of the first Macedonian War, was marked by attempts by certain neutral powers to achieve a settlement between Philip V and Aetolia, which would have the effect of excluding Rome from the Greek world.⁵ The powers which thus intervened were no doubt primarily moved by commercial considerations, by the realization that among the many uncertainties which would follow upon the appearance of Rome in the political world of the Aegean would be the future of their own commercial pre-eminence. Consequently we find most conspicuous among the neutrals Rhodes and Egypt, now at the end of the century again closely associated after the years of estrangement in the previous generation.⁶ By their side stands, on more than one occasion in the first Macedonian War, an envoy from Chios, a state which had close commercial contacts

¹ Nothing appears to have been inscribed on the second line after *μηνός*, but traces of the month probably survive in the single word written in the third line, ending, as do the genitive cases of all Macedonian months, with the letters O(?)Y. The surviving signs of the earlier letters of the word cannot be determined: the marks appear to begin under the iota of the date *ΙΓ* of the preceding line, so a short month-name, such as *Δίου* or *Λώου*, seems unlikely.

² Mr. Skeat points out to me that the Edfu papyrus republished by Mlle Préaux, *Chron. d'Égypte*, 14, 376, indicates that in year 14 of Philopator Daisios 9 fell within the last few days of Choiak. He adds: 'this agrees very closely with the tables in Meyer's *Chronologie*, p. 86, and if one looks at the same table under year 13 it appears that Choiak 23 would be the equivalent of Daisios 28. So if there is room for *Δαισίου* on the vase, this would suit very well'.

³ The arguments for or against the identification of individuals are now given by Braunert, *op. cit.* 248 ff. The one certain identification seems to me to be that of Timasitheos, the son of Dionysios, the Rhodian (Brec. 13 = Brau. 25), who may be safely identified with the Rhodian of the same name and patronymic who went as ambassador to Iasos c. 218 B.C. (Braunert, 248-9, following Beloch, argues for a date early in the reign of Philip V for the Iasian-Rhodian documents now reprinted in Holleaux, *Études*, IV, 146 ff. But he makes no mention of the new, only partially published, inscriptions from Labranda dated to Philip's third year (218), which make it almost certain that the early date is right for Iasos too: see the observations of Robert in Holleaux, *op. cit.* 162, n. 1. In fact, if the identity be admitted, the Iasian documents *must* be of the early period, since Timasitheos died in Alexandria in 213 (cf. Braunert, *loc. cit.*)).

⁴ See Braunert, *op. cit.* 250-63, who attempts to reconstruct much of Ptolemaic foreign policy in the latter part of the third century on the basis of the ethnic designations of the envoys. This part of his article is the least satisfactory, showing insufficient acquaintance with modern developments in the field of Ptolemaic history.

⁵ On these interventions see the analysis of Holleaux, *Rome, la Grèce*, etc. 35 ff.

⁶ See Braunert, *op. cit.* 257; Fraser, *Parola del Passato*, 7, 202, nn. 1-2. For the re-established contact, apart from the joint neutral investigation here mentioned, see particularly Polybius' characterization of Philopator: οὐ μὴν ἀλλὰ προσκλίνων τοῖς Ῥοδίοις κατὰ τὴν ὅλην αἵρεσιν (IV, 51, 5).

with Alexandria in the third century.¹ In the late spring of 209 envoys from Egypt, Rhodes, and Chios appeared before Philip;² in the next year the Chians were absent,³ but they were back again in 207.⁴ The death in Alexandria of Nicostratus the Chian envoy, in Choiak, that is March, 209, immediately precedes the joint embassy of Rhodes, Egypt, and Chios to Philip in the early summer. It may be suggested that it was in connexion with the joint embassy in the same year, perhaps in the same month, that Nicostratus was in Alexandria. He died, it may be, before he could accomplish his mission.

¹ Vanseveren, *Rev. Phil.* 1937, 330-2.

² Livy, xxvii, 30, 14; cf. Walbank, *Philip V*, 89-90. For the necessary corrections to Livy's chronology of these years see Walbank, *ibid.* 304-5.

³ Liv. xxviii, 7, 14. Appian, *Maced.* 3, 1 records an embassy composed of Egyptian, Chian, and Mytilenaeen envoys (and Arynandros), which appears to be a confused account of one or more of the embassies of these years: see Walbank, p. 94, n. 7.

⁴ Polyb. xi, 4, 1.

THE ROMAN REMAINS IN THE EASTERN DESERT OF EGYPT *(continued)*

By DAVID MEREDITH

THE difficulty of dating the periods of exploitation applies to most of the gold sites throughout the Eastern Desert. It is complicated by the fact that as one moves southward from the Philoterias road hieroglyphic inscriptions of dynastic date become increasingly frequent, often mingled with graffiti and proscynemata of the Graeco-Roman period. The main features at ancient gold-mining¹ sites are briefly as follows: (a) ancient workings (both open-cast on auriferous dykes and underground to considerable depths vouched for by modern engineers and, possibly, some alluvial workings for placer gold); (b) abundant reciprocatory rubbing-stones everywhere (each pair consisting of a two-lugged upper stone, slightly convex with roughly parallel striations, rubbed against a rectangular, concave nether stone similarly striated); (c) upper and lower rotating hand-mills, like those of fellahīn today (common in N. Sudan gold areas, but specimens reported so far, in Egypt, only at Giḏāmi, 'Eridīyah, Danḡash, Wādi Merkh and Barramīyah); (d) rubbing stones, usually the two-lugged upper stones, built into walls at Abu Zawal and Semnah (both Roman stations) as well as at 'Eridīyah, Danḡash, Barramīyah, and probably elsewhere; (e) the later use of rubbing stones as anvils or pounding stones (their old striations partly worn away and pock-marked with small pits); (f) inclined gold-washing tables (a primitive version of those still used in Cornish tin mines), common in the Sudan but so far reported in Egypt only at Danḡash and Barramīyah; (g) banks of gold-crushing tailings at Abu Zawal (where, as noted above, the Roman station is built partly on them), 'Eridīyah (unconfirmed), Fawakhīr (see below), and Barramīyah; (h) the two embankments at Semnah and traces of another at Haimur suggest but are almost certainly not alluvial workings for detrital gold, of which traces have been found elsewhere (in Wādi Allāki near the Sudan border); (i) underground water level (apparently, in places visibly, higher in ancient times than today).

¹ Gold mining: (a) Diodorus (quoting Agatharchides), III, 12-14. (b) Wilkinson MS. XXXVIII, *passim*. (c) Floyer, *Nord-Etbai*, *passim*, with inset sketch-maps of mine areas on map, p. 39; also a map, p. 55. (d) Alford, *Report on Ancient and Prospective Gold Mining in Egypt* (1900), 13; *Trans. Inst. Min. Metall.* 10, 2-16, with two pls. (e) Barron and Hume, *Topog. and Geol. of E. Desert of Egypt, Central Portion*, 43, 259-62. (f) Llewellyn, *Report to Egypt and Sudan Min. Syndicate*; manuscript field notes and photograph collection relating to gold-mining areas in Eastern Desert and Northern Sudan 1901-25, by courtesy of Mr. Brian Llewellyn, Tavistock. (g) Weigall, *Travels in Upper Egyptian Deserts*, 133-8. (h) Thomas, *Cairo Sci. J.* 3, 112 ff. (i) Green, *PSBA* 31, 247 ff. (esp. p. 250), 319, with pl. 53 (21). (j) Cross, *Mining Mag.* 11, 380-2. (k) Hume, *Geol. of Egypt*, II, 111, *passim*, with many maps and photographs. (l) Lethbridge, *Mining Mag.* 75, 219 ff., with photographs of reciprocatory mills. (m) Lucas, *Ancient Eg. Materials and Industries*, 3rd ed., 257 ff. (n) Tregenza, *Bull. Fac. Arts*, 11 (1), 128 ff. (o) Meredith, *Ill. London News*, 217, 992. (p) PW, s.v. Bergbau, in Suppl. IV, (Orth.).

EASTERN DESERT OF EGYPT

• ROMAN REMAINS IN THE SOUTHERN
AREA ON THE LEUCOS LIMEN AND
BERENICE ROADS •

CONTOUR ----- 500 MÈTRES

0 10 20 30 40 50 MILES

- ROMAN STATION
- ▣ PROBABLE STATION
- ANCIENT GOLD-MINES (PERHAPS ROMAN)
- x CAVE SHELTERS SACRED TO PAN





1. Roman Station of Jovis



2. Roman Station at El-Mwēh



3. Nectanebo Shrine in Wādī Hammāmāt

ANCIENT REMAINS IN THE EASTERN DESERT

Some of these sites (e.g. Barramīyah,¹ which had, before the extensive mining operations early this century, an apparently Roman temple on a hill as well as a Roman enclosure with a well-arranged, outside bath-house) show clear signs of exploitation at two (possibly even three) periods. On present evidence, including the collection and identification of relatively small amounts of pottery, it is possible to say that the most northerly gold sites were worked by the Ptolemies, possibly a little by the Romans but not by the Ancient Egyptians. In the central area both the Ptolemies and the Ancient Egyptians worked the gold mines, but not, apparently, the Romans. In the south it is again clear that the mines were worked in Ptolemaic and dynastic times but not (with the exception, for the moment unexplained, of Barramīyah) by the Romans. In the Eastern Desert of the Northern Sudan there is ample evidence that early Arabs worked the gold extensively. Here the ancient settlements were scattered, with no enclosure, and contained mainly rotating mills, a small number of which, as noted above, have been found in the Eastern Desert of Egypt.

The Leucos Limen road² is also named by no ancient writer but has a great many hieroglyphic rock inscriptions of many periods, about 120 Graeco-Roman inscriptions at Hammāmāt (where most of the dynastic inscriptions are) and sixty or so Greek and Latin ostraca at Fawakhīr, the gold site (still worked today) which Murray has identified with that shown in the Turin Papyrus.³ East of Fawakhīr, several uniform Roman stations⁴ at short distances apart (with interior well excavations but no outside animal lines), with frequent intervisible signal towers on heights along the twisting ravines, suggest a valuable traffic that did not call for very large animal teams. The sixty ostraca at Fawakhīr⁵ were found recently in the numerous ancient houses and the tailings near the ancient gold mines. Written mostly in Greek (only seven are in Latin, five of them from the same man to a fellow soldier or to his brother), they have been read by O. Guéraud.⁶ They are about the day to day needs in oil, bread, vegetables, etc., of people,

¹ Barramīyah: (a) Llewellyn, manuscript field notes, see p. 95, n. 1 (f), with plan of enclosure and bath house. (b) Cross, op. cit., 382. (c) Murray, *JEA* 11, 145; he has since found a jasper seal with a Roman radiate head (late third century) and a hieroglyphic tablet mentioning an official of 'the Treasury of the House of Amūn' (date not certain).

² Leucos Limen road: (a) Ptolemy, 1 v, 5 (the port only). (b) Burton MSS.: 25624, old p. 63—new p. 130; 25625, 147—59; 25628, 151, 156 verso. (c) Wilkinson MSS.: XXXVIII, 145—54, with several plans; XLV, D. 7 gives a plan, wrongly called 'Leucos portus', of the ruins in Mersa Shūna, cf. p. 101, n. 2. (d) Letronne, op. cit. II, 444—8. (e) Von Heuglin, *Petermanns Mitteilungen*, 9, 332, with map on pl. 15; at Mersa Shūna. (f) Barron and Hume, op. cit. 45—51, 54—56, 85. (g) Weigall, op. cit., chs. 2 and 3. (h) Couyat-Barthoux, *Acad. Inscr.* 10 (1910), 532, with plan of Zerka station on p. 529, fig. 1. (i) Lesquier, *L'Armée romaine d'Égypte*, 444. (j) Murray, *JEA* 11, 142, 145, with pls. 14 (1), 16 (2). (k) Porter and Moss, *Topog. Bibl.* 328—38. (l) PW, s.v. *Λευκὸς λιμὴν* (Kees).

Many classical and Semitic inscriptions, recorded by Winkler at Kuṣūr el-Banāt, Abu Kuei', El-Mwēh and from a Pan cave-shrine near Wādī el-Kāsh are being studied and will be published. See p. 105, n. 5.

³ Turin Papyrus: (a) Murray in Ball's *Egypt in the Classical Geographers*, App. I, 180, with pls. 7, 8. (b) Goyon, *Ann. Serv.* 49, 337 ff., an argument in favour of a site west of Fawakhīr, with a summary of all previous work on the subject. (c) PW, s.v. *Bergbau* (Orth).

⁴ Wilkinson MS. XXXVIII, 144—6, with several plans.

⁵ Fawakhīr: (a) Burton MSS.: 25624, 26; 25625, 148. (b) Wilkinson MS. XXXVIII, 146, with map. (c) Couyat-Barthoux, *Acad. inscr.* 10 (1910), 534—6. (d) Murray, *JEA* 11, 145—6, with pl. 13 (2). (e) Porter and Moss, op. cit. 337.

⁶ Guéraud, *Bull. Inst. fr.* 41, 141 ff., with one plate.

apparently military, who lived here for some time. They had regular communication by carter and mounted messenger with (apparently) the Nile, with another desert spot still less favourably placed ('Aṭallah?) and another place called a *praesidium*. The ostraca are not dated but they are evidently of Roman date as the names, written in Greek, are Roman, probably those of auxiliaries. Were the Romans working the ancient gold mines? The ostraca do not tell us this, for such tools as they mention might equally apply to stone quarrying. There is no trace of a station at this spot, but a temple of Min (destroyed) had a cartouche of Ptolemy III (Euergetes I). The god Min (or Pan) was the protector of desert travellers and appears universally in Eastern Desert *proscynemata*, ranging from rough graffiti to formal stelae, an example of which we have already seen at the little temple of the quarrymen's village at Semnah (*JEA* 38, 106).

Ḥammāmāt¹ has many hieroglyphic rock inscriptions from Protodynastic to Ptolemaic times. The 120 or so Greek and Latin and about thirty-five demotic inscriptions found here (recorded by Wilkinson, Burton, Nestor l'Hôte, Lepsius, and Reinach) are nearly all *proscynemata*.² Among them is the one, already mentioned, naming as μεταλλάρχης Publius Juventius Rufus, with his freedman Agathopus (date A.D. 19). There are very meagre remains of a square enclosure, but no trace of its inner rooms. The Roman *proscynemata* are from Augustus to Titus and Domitian. A fork in the road as it approaches the Nile leads to both Kēna and Kift, suggesting ancient river wharves at both Kainepolis and Koptos. The small station in Wādī Matūlah (on the Koptos branch) is now only an empty shell, like Giḏāmi.

The Berenice road,³ mentioned in Strabo, Pliny, the Antonine Itinerary and the Peutinger Table (Segment 8), was built, according to Pliny, by Ptolemy II. Nothing so far found in the ruins of the temple at Berenice has confirmed this—the vague remains of the surrounding town have never been investigated to any extent. Philadelphus probably reconditioned and fortified an ancient route, for numerous hieroglyphic (dynastic) inscriptions have been found on or near the road; many in Wādī 'Abbād (on the Apollinopolis branch), some at Umm 'Awad, Shelūl and in Wādī

¹ Ḥammāmāt: (a) Pliny's *Basanites* (xxxvi, 2) and Ptolemy's βασιάνιτου λίθου ὄρος (iv, 5) may possibly refer to this area, but this is debatable; see PW below. (b) Burton MSS.: 25624, 127 (?); 25625, 148. (c) Wilkinson MS. XXXVIII, 147. (d) Letronne, *Recueil des inscr. grecques et latines d'Égypte*, II, 423; Atlas, pl. 37. (e) Fitzler, *Steinbrüche u. Bergwerke*, 41, 99, 113, 126–8. (f) Dubois, *Étude sur l'admin. et l'exploit. des carrières*, 68–73 (under Mons Berenicidis). (g) Lesquier, op. cit. 445–6. (h) Murray, *JEA* 11, 145–6. (i) Porter and Moss, op. cit. 328 ff. (j) PW, s.v. Steinbruch (Fiehn), Bergbau (Orth), βασιάνιτου λίθου ὄρος (Sethe); cf. Μέλας λίθου ὄρος (Kees), Metalla (Kiessling).

² Dr. Klasens, in a preliminary examination of the demotic inscriptions, finds dates from Nectanebo I and II to the early Ptolemies.

³ Berenice road: (a) Strabo, xvi, 4, 5; xvii, 1, 45; Pliny, vi, 102–3, 168. (b) Summary of ancient geographical data in Ball, op. cit. 83. (c) Cailliaud, *Voyage à l'Oasis de Thèbes, passim*. (d) Belzoni, *Researches and Operations*, third journey, *passim*. (e) Wilkinson MSS.: XXXVIII, 57–91; XLV, D. 8. (f) Letronne, op. cit. I, 448. (g) Golénisheff, *Rec. trav.* 13, *passim*, with some plans; incorrect table, pp. 96–97. (h) Floyer, *Nord-Ethai, passim*, with maps on pp. 39, 95, 113 and photographs on pp. 146, 160. (i) Maspero, *Ann. Serv.* 2, 194. (j) Green, *PSBA* 31, 247 ff.; Graeco-Roman evidence reported on pp. 249, 250. (k) Couyat-Barthoux, *Acad. inscr.* 10 (1910), 536. (l) Weill, *Ann. Serv.* 11, 97. (m) Ball, *Geog. and Geol. of S.E. Egypt*, Introd.; see also (b) *inscr.* 10 (1910), 536. (n) Lesquier, op. cit. 448. (o) Murray, *JEA* 11, 143–4, 145; *Blackwood's* 260, 383, 385–6. (p) Warming-ton, *Commerce between the Roman Empire and India*, ch. i, with notes. (q) Hyde, *Anct. Greek Mariners*, 194, with n. 24. (r) Porter and Moss, op. cit. 321–7. (s) PW, s.v. Berenice (Sethe), Koptos (Kees).

Kharīṭ, one (possibly Ptolemaic) at Sigdīt, as well as some (not confirmed except in one case already mentioned) at Barramīyah. Several, of more than one period, have been recorded at Bīr Menīḥ. In Wādī Menīḥ el-Hēr there is an enclosure, the *Afrodito*¹ of the Itinerary. A Latin inscription found by Wilkinson beside its interior well in 1826 is still unpublished. It is apparently on a fallen lintel stone and records the construction *hoc loco nudo* of a *praesidium* at the order of a Prefect of Berenice, M. Trebonius Valens, a name not hitherto known. Unfortunately the line giving the date was too damaged (possibly erased) to be legible, but mention of a prefect of this area, unaccompanied by the title of overseer of *metalla*, places the date rather later in the first century. Mr. Birley reads the name of the chief official in the inscription as L. Julius Ursus, thus giving a date A.D. 84 (Domitian).²

Ancient geographers of the Roman period give Koptos as the Nile terminus of the Berenice road. The southern arm, starting from Apollinopolis (Edfu), is not mentioned by them. Yet its many dynastic and Ptolemaic inscriptions show that originally the road reached the Nile here rather than (or as well as) at Koptos. The first Roman station from the Nile (Gihād,³ at Bīr 'Abbād) has Ptolemaic inscriptions on two blocks built into its walls. The mixed Greek and Roman character of the second station (El-Kanāis⁴ in Wādī 'Abbād) suggests a Roman reconstruction of a Greek fort. An inscribed block found inside bears a dedication by Satyros to Arsinoë Philadelphus, the sister-wife of Ptolemy II. On the walls of the rock temple and on the neighbouring rocks Wilkinson found many Greek inscriptions of both Ptolemaic and Roman date,⁵ mostly military.

Little is known of the detail of Roman stations along the Berenice road beyond their identification by Wilkinson, Floyer, Golénisheff, Couyat-Barthoux, and Murray. Wilkinson left many small, well-drawn plans of Roman stations, including a number in the south. Several people have partly cleared and examined the so-called Temple of Serapis at Berenice,⁶ but only Wilkinson (1826) and Wellsted (1836) have left notes of the faint, scattered ruins of the ancient town. The best plans of the temple are those of

¹ *Afrodito*: (a) Wilkinson MS. XXXVIII, 152, with plan; *Topog. of Thebes*, 417. (b) Green, *PSBA* 31, 252 ff., with pls. 33-35 (Old and Middle Kingdom); one or more Roman inscriptions reported but not given. Numerous Greek and Latin inscriptions (and Nabataean graffiti) reported by Winkler in this area; see below (p. 105, n. 5) and Meredith, *JRS* 43.

² Stein, *Präfecten*, 42.

³ Gihād (Bīr 'Abbād): (a) Wilkinson MS. XXXVIII, 56, with plan p. 57. (b) Letronne, op. cit. II, 244. (c) Weigall, op. cit. 152, with pl. 25 (1); no inscriptions mentioned. (d) Green, *PSBA* 31, 248, with a plan. (e) Murray, *JEA* 11, 145. (f) Porter and Moss, op. cit. 321.

⁴ El-Kanāis (Wādī 'Abbād): (a) Wilkinson MS. XXXVIII, 57, with plan. (b) Golénisheff, *Rec. trav.* 13, 78, n. 1. (c) Weigall, op. cit. 164-5, with pl. 27 (1). (d) Murray, *JEA* 11, 145, with pls. 15 (2), 16 (3). (e) Porter and Moss, op. cit., 321-5.

⁵ (a) Wilkinson MS. XXXVIII, 62-63. (b) Letronne, op. cit. II, 242, 255. (c) Weigall, op. cit. 162-3.

⁶ Berenice, with Kalālāt (two stations) and Shenshef: (a) Strabo, XVI, 4. 5; XVII, 1. 45; Pliny, VI, 103, 168; *Periplus of the Erythraean Sea*, 1; Ptolemy, IV, 5. (b) Juan de Castro, *Roteiro* (ed. Kammerer), 126. (c) Belzoni, op. cit. third journey, 330-4, with pls. 32, 34. (d) Wilkinson MSS.: XXXVIII, 83, 91-7 (with hieroglyphic texts, scenes, and cartouches), 99-104 (Kalālāt and Shenshef); V, 50 (cartouches); XLV, D. 6, 11 (plans of the site, including the town, and of the temple). (e) Wellsted, *JRGS* 6, 96, with view and plan of temple p. 100 (reprinted in *Travels in Arabia*, II, 334). (f) Letronne, op. cit. I, 382, 384, 464; Atlas, pl. 14 (13-16). (g) Purdy, *Bull. Soc. Khéd. de Géog.* (1886), 431; his plan below, see Daressy. (h) Schweinfurth, *Zeit. f. allgemeine Erdkunde*, 18 (Neue Folge), 381 ff. (reprinted in *Auf unbetretenen Wegen in Ägypten*, 131 ff.). (i) Golénisheff, *Rec. trav.* 13, 86 ff., with pls. 4, 5, 6. (j) Floyer, op. cit. 11, 127, with photograph on p. 10; *Geog. JRGS* 1, 414.

Purdy and Golénisheff. Various readings have been made of the much-ruined cartouches still remaining on the heavily salt-encrusted walls until the latter part of the last century—all (apparently) being those of first- and second-century emperors. Wilkinson, in 1826, saw more wall scenes and cartouches than anyone else and copied them in his manuscript notes, though not very clearly. As the temple was heavily sanded-up, Wilkinson had time to clear only part of one or two rooms and therefore missed certain scenes found by others, notably one given by Golénisheff (see below). A Greek fragment by Wilkinson names Marcus Aurelius and Lucius Verus. The main hieroglyphic text copied by Wilkinson (since destroyed by salt incrustation but the bottom characters still visible to Golénisheff in 1890) refers to the land of Wawat (Nubia). Professor Černý declares this text to be of Ptolemaic date. It is tempting but premature at this stage to see in Golénisheff's fragment about the 'land of the green stone' a reference to the 'Emerald Mountains' (actually beryl mines), which is accompanied by the cartouche of a Roman emperor. The possible connexion between Berenice and the beryl mines (Mons Smaragdus) in Roman and pre-Roman days is touched upon below. One of the Greek texts found by Wilkinson has a dedication to Serapis. A fragment, found by Wellsted and sent to Wilkinson, has a dedication to Ptolemy VII (Euergetes II) and his queen, Cleopatra. The right part of this inscription, its finding-place given doubtfully as Berenice, is in the Alexandria Museum and shows that the bottom of Wilkinson's fragment is broken off but recorded the name of the dedicator, an official. Ptolemy VII and Cleopatra figure in several inscriptions, including one which will be mentioned in connexion with Smaragdus Mons (see Soterichos inscription, p. 104). Although we still have no evidence on the spot of Ptolemy II, credited with the foundation of Berenice and the road from it to the Nile, it is hoped that the hieroglyphic texts from the Wilkinson MS. may throw new light on this.

Such coin evidence as has been found at Berenice supports the Roman (hieroglyphic and Greek) inscriptions there—a 'Poppaea coin' which Wilkinson found with other ancient coins (unspecified) and several coins of Constantius II found there by Murray.¹

The nearest main road station to Berenice is at Abu Kṛēyah, identified with the Cenon of the Itinerary and Vetus Hydreuma² of Pliny. Wilkinson found here five separate walled enclosures of various shapes and sizes, one being a normal Roman square but without bastions and another a square but with one rounded end (with bastions), closely resembling the castellum at Semnah (*JEA* 38, pl. 15 (4)). Three small forts perched on isolated hills are situated at intervals extending over a mile up a wādi. The last of these overlooks a well beside which are remains of what may be the begin-

(k) Couyat-Barthoux, *Acad. inscr.* 10 (1910), 527. (l) Dubois, op. cit. 68, including Fawakhīr and Hammāmāt in the same administration (Mons Berenicidis). (m) Ball, op. cit. 29. (n) Fitzler, op. cit. 8, 50, 130; see also p. 98, n. 1. (o) Lesquier, op. cit. 455. (p) Daressy, *Ann. Serv.* 22, 169–84, with Purdy's plans. (q) Murray, *JEA* 11, 143 (with n. 3 on Kalālāt); ibid. 12, 166 (Shenshef). (r) Porter and Moss, op. cit. 326–7. (s) PW, s.v. Berenike (Sethe). Professor Fairman confirms the Roman date of Wilkinson's cartouches and has kindly agreed to work on the hieroglyphic fragments from the temple with a view to publication.

¹ (a) Wilkinson MS. XXXVIII, 95. (b) Murray, *JEA* 11, 143.

² Vetus Hydreuma (Abu Kṛēyah); Cenon of Anton. Itin.; (a) Pliny, VI, 102. (b) Wilkinson MSS.: XXXVIII, 89; plan in XLV, D. 8. (c) Golénisheff, *Rec. trav.* 13, 85, with partial plan. (d) Couyat-Barthoux, *Acad. inscr.* 10 (1910), 530, with photograph in fig. 2 (6).

ning of a long conduit or aqueduct down to the main enclosures. This small hill fort contains within its walls a high point from which all the other enclosures are visible.

It is not clear why the Romans went to so much trouble at this spot. It may have been one of the sources of water for Berenice. At the same time, it is the junction point of the Via Hadriana¹ which, after its detour inland via Abu Qariah (*JEA* 38, 105), keeps close to the coast till it finally turns inland, past a tiny station in Wādī Laḥamī, to the Vetus Hydreuma. An inscription (A.D. 137–8) from the ruins of Hadrian's dismantled city of Antinoë (Shēkh 'Ibādah) describes the building of the Via Hadriana from Berenice to Antinoë, its route 'marked with plenty of hydreumata, stations and garrisons'. Numerous cleared stretches still mark its progress north until it turns inland across the desert at lat. 28° 20' N. No traces of stations on this inland stretch have been found. In 1800, however, Alexis Bert and Raffeneau-Delile, officers of Napoleon's 'Commission', found in the upper reaches of Wādī Ṭarfah a long stretch of typical cleared road which, although they did not know it, was undoubtedly the Via Hadriana. In 1822, while travelling southward along the Red Sea coast, Burton received a report of '... an ancient (*paved*) road to the Nile' at the latitude of Howashīyah, reaching the river at Antinoë. Couyat-Barthoux noticed (in 1922) that traces of this part of the ancient road still survived.

The Via Hadriana touches many shallow anchorages which may be among the unnamed 'portus multi'² of Pliny. Of the five ports named in ancient records the sites of Myos Hormos and Berenice have, despite much disagreement about the former, been certain since their discovery by Burton and Belzoni respectively. Had Juan de Castro landed when his ship was in the bay of Berenice, he could have discovered the ruins of the city and its temple centuries before Belzoni. Murray has identified Leucos Limen with Kuṣēr rather than with the ruins (described by Couyat-Barthoux as late) some miles north at Kuṣēr el-Qadīm. As mentioned earlier (*JEA* 38, 105), the identification of Philoteris,³ after considerable disagreement among investigators, is now reasonably assured. Some miles inland from Philoteris, in Wādī Gāsūs,³ is a scattered settlement including both dynastic and Roman (or Graeco-Roman) remains. This is probably the

¹ Via Hadriana: (a) *Description de l'Égypte*, État Mod., II, pl. 100; map by Raffeneau-Delile, text by Bert, see (h) below. (b) Burton MSS.: 25624, 6; 25625 and in the maps of 25628, references to stretches of ancient coastal road between Safāga and Kuṣēr. (c) Wilkinson MS. XXXVIII, *passim*, along the coast. (d) Letronne, op. cit. I, 173, 188. (e) Schweinfurth, *Alte Baureste*, 2. (f) Müller, *Revue arch.* 21, 313 ff. (g) Lumbroso, *Egitto al tempo dei Greci e dei Romani*, 39. (h) Barron and Hume, op. cit. 109–10. (i) Couyat-Barthoux, *Acad. inser.* 10 (1910), 539; *Bull. Inst. fr.* 9, 137, continued in 10, 1 ff.; this contains the account by Bert, beginning in 9, 149: the precise passage in question is in 10, 46. (j) Lesquier, op. cit. 436–7. (k) Milne, *Egypt under Roman Rule*, 46–47. (l) Murray, *JEA* 11, 149. (m) PW, s.v. Berenike (Sethe), *Λευκὸς λιμὴν* (Kees), Smaragdus Mons (Honigsmann).

² Red Sea ports: (a) Diodorus, III, 39, 1–3; Strabo, XVI, 4, 5; Pliny, VI, 167–8; Periplus, I, 3; Ptolemy, IV, 5. (b) Juan de Castro, op. cit. 122–44 (with pl. 23), 154–9. (c) Wilkinson MSS.: XXXVIII, 113–43; XLV, D, 4, 6, 7, 9, 11, 13, 14. (d) Letronne, op. cit. I, 172. (e) Müller, *Geographi Graeci Minores*, I, liv, 111, with map in III, pl. 6 (Agatharchides); *ibid.* xcv, 257, with map in III, pl. 11 (Periplus). (f) Lesquier, op. cit. 420, 434. (g) Couyat-Barthoux, *Acad. inser.* 10 (1910), 526 ff. (h) Murray, *JEA* 11, 141. (i) Warmingston, loc. cit. (j) Wallace, *Taxation in Egypt*, ch. 15 (with notes). (k) De Laet, *Portorium*, 306–11. (l) PW, s.v. *Ἐρυθρὰ Θάλασσα* (Berger).

³ Philoteris, with Wādī Gāsūs (probably Aenum) and Wādī Safāga: (a) Strabo, XVI, 4, 5 Pliny, VI, 168; Ptolemy, IV, 5. (b) Juan de Castro, op. cit. 139 (at Old Kuṣēr). (c) Burton MSS.: 25626, 86a; 25628, 151 (map);

Aenum which Pliny gives as another name for Philoteris—it was not unnatural for him (writing only from earlier records and hearsay) to associate in his mind the inland mining area with its port at the mouth of a neighbouring wādi. Inside a small temple at 'Aenum' Wilkinson found and copied a Sesostriis II stela and it may be here (a hint in one of his rough maps suggests another site nearer the sea) that Burton found a second Twelfth Dynasty stela, of the previous reign (Ammenemes II). Burton brought both stelae away and sold them with the rest of his Egyptian collection at Sotheby's in 1836, but not without making small, admirable pencil drawings of them both. He also has a drawing of a Twenty-sixth Dynasty scene (Psammetichus I), cut in the rock-face at the junction of Wādi Gowwa. He must have seen this during his travels in this area but this scene remained unknown until Schweinfurth 'discovered' it a quarter-century later and published it inaccurately, with notes by Erman. While housed in Alnwick Castle, the two stelae were published by Birch. They are now undergoing further study.¹ The Gāsūs district was mined for lead and, as traces show, copper. Above the entrance to one of the ancient lead mines Tregenza has found a short, well-cut text and in the same district (from indications given by local phosphate mining officials) a granite boulder of Psammetichus I or II. Some miles away, in Wādi Sākī, is a scene showing Ramesses III offering to Amen-Rē, this scene being identical with one already recorded at 'Aṭallah.

Near the site which we have provisionally called Aenum, Tregenza has found three Ptolemaic inscriptions, one of them naming 'the Philometers', Ptolemy VI and his queen Cleopatra. These three inscriptions (as well as a small stela, reported by Mr. Davey of the mining company, which shows a dedication to Pan, Isis and Sarapis) were all found near ancient amethyst workings—similar workings, in the same district (Gebel Abu Diyēba), were reported by Murray in 1914.² Near Bīr Waṣīf,³ a little farther inland, there are remains of an ancient mining settlement, with rock markings going back to prehistoric times. A Darius inscription found here has been published by De la Roque who, in noting also a Greek inscription at this spot, read Θ as O and so missed the simple message of the graffito which, in well-cut capitals, gives the man's name, his parentage and his place of origin (ΝΙΚΑΓΟΡΑΣ ΚΑΕΟΜΕΝΟΥΣ ΘΑΣΙΟΣ). Nikagoras was probably one of the men at the Ptolemaic workings beyond the hill, who, having strolled over one day to visit the ancient site near the water in Wādi Waṣīf,

25629, 48–50. (d) Wilkinson MSS.: XXXVIII, 139, 143, 145 (plan p. 85); XLV, D. 18, at Old Kuṣēr. (e) Letronne, op. cit. 1, 177, 187. (f) Von Heuglin, loc. cit. at Old Kuṣēr. (g) Erman, *ZAS* 20, 203–5. (h) Schweinfurth, *Alte Baureste*, 4, with pls. 1 (map), 2 (Wādi Gowwa inscription) and Notes by Erman, p. 17 ff. (i) Barron and Hume, op. cit. 36 (at Old Kuṣēr). (j) Weigall, op. cit. 60–61 (at Old Kuṣēr). (k) Couyat-Barthoux, *Acad. inscr.* 10 (1910), 527 (at Myos Hormos). (l) Birch, *Catal. of Alnwick Castle Museum*, 267–8 (with pl. 3), 268–70 (with pl. 4). (m) B. de la Roque, *Bull. Inst. fr.* 11, 133. (n) Murray, *JEA* 11, 142; *Cairo Sci. J.* 7, 179. (o) Petrie, *Hist. of Egypt*, III, 333, with fig. 140. (p) Lucas, op. cit. 276 (lead), 445 (amethyst). (q) Porter and Moss, op. cit. 338–9. (r) PW, s.v. Philoteris (Kees), *Λευκὸς ἀμύθιν* (Kees). ¹ Leclant, *Orientalia*, 22, 90.

² Twelfth Dynasty amethyst workings in Wādi el-Hudī (SW. of Aswān, see map) were reworked in Roman times; Labib Nessim, *Congrès internat. de géographie*, Cairo, 1925, III (1926), 167; Lucas, op. cit. 445; Rowe, *Ann. Serv.* 39, 187–94; Fakhry, *ibid.* 46, 51–4; *Inscriptions of the Amethyst Quarries in Wādi el-Hudī* (Cairo, 1952). Fakhry's 'Twelfth Dynasty Fortress' at Site 9 (plan in fig. 9) is undoubtedly a Roman castellum. No Roman inscriptions here, but Pliny (xxxvii, 40) may well refer to these workings.

³ Waṣīf: (a) B. de la Roque, *Bull. Inst. fr.* 11, 132–3. (b) Tregenza, MS. notes (1951). Cf. Murray, *Cairo Sci. J.* 8, 179; *JEA* 11, 146.

decided to leave his mark. The whole of this interesting area will repay further investigation. Although it has so far offered no inscription evidence of definitely Roman date, the presence of Roman buildings at the central point ('Aenum') and of a small Roman station near the coast in Wādī Safāga strongly suggests that such evidence may come to light.

There is still doubt about the site of Nechesia,¹ a port first mentioned by Ptolemy (A.D. 90-168). Following Murray's confident agreement with Floyer, it is provisionally placed in the bay of Wādī Mubārak. This has no ruins but is the natural outlet from the Umm Rūs gold workings 4 miles inland. Wilkinson placed Nechesia in the bay of Wādī Nakari to the south, where there are also ancient gold workings (among the biggest in the Eastern Desert) some miles inland at Sukari. Mersa Nakari has an ancient enclosure (of hewn limestone blocks) that has strongly Roman characteristics. Points to be considered are that Ptolemy (always fairly accurate in this area) gave Nechesia the latitude of Mersa Mubārak, that neither Umm Rūs nor Sukari have been dated (they are almost certainly Ptolemaic, as their reported remains are similar to those at other gold sites) and that from neither of the two harbours is there evidence of a well-defined Roman road. The present shallowness of the Red Sea anchorages is due in part to centuries of silting-up, while certain geological facts make it probable that the sea level at certain points was relatively higher in Roman times, this coast having risen in recent centuries (cf. Myos Hormos in *JEA* 38, 104).

From the last vestiges of Apollonos station² (only one corner of the enclosure left), a road leads east and then north to the so-called Emerald Mountains.³ The scattered settlements are in Gebel Zabāra (Smaragdus Mons), in Wādīs Nugrus and Sikēt and, to south-east along Wādī Gemāl, at Umm Kābu (these last probably Arab). Although

¹ Nechesia: (a) Ptolemy, iv, 5. (b) Juan de Castro, op. cit. 134-6 (at Mersa Shūna). (c) Wilkinson MSS.: XXXVIII, 113; plan (of Mersa Nakari) in XLV, D. 9. (d) Von Heuglin, loc. cit. (at Mersa Shūna). (e) Schweinfurth, *Auf unbetretenen Wegen*, 309 (at Mersa Mubārak). (f) Floyer, *Nord-Ethai*, 32, 49, with plan of Umm Rūs inset in p. 39; *Geog. JRGs* 1, 428-9 (evidence of two periods of mining at Umm Rūs). (g) Alford, *Report on Ancient and Prospective Gold Mining in Egypt*, 9, 29, with pl. 5; *Trans. Inst. Min. Metall.* 10, 12-13, 16 (Umm Rūs). (h) Llewellyn, MS. notes (see p. 95, n. 1); about Umm Rūs. (i) Couyat-Barthouix, *Acad. inscr.* 10 (1910), 528 (at Mersa Shūna). (j) Lesquier, op. cit. 435, with summary of identifications. (k) Murray, *JEA* 11, 142. (l) PW, s.v. Nechesia (Kees), Smaragdus Mons (Honigmann).

² Apollonos: (a) *CIL* III, 6627 (= Breccia, *Iscrizioni*, 101-3 (No. 179), pl. 38 (91-92); Tait, *Greek Ostraca*, 1, 114 (No. 245).

³ Smaragdus Mons ('Emerald Mountains'): (a) Strabo xvi, 4. 20; xvii, 1. 45; Pliny, XXXVII, 17; Ptolemy, iv, 5; Olympiodorus (in *Frag. Hist. Graec.*), 37. (b) Bruce, *Travels*, I, ch. 9; he may be untrustworthy. (c) Cailliaud, op. cit., first journey, with pls. 2, 3, 5, 6, 7 and map on pl. 4. (d) Belzoni, op. cit., third journey, 314-15, 337-9, with pls. 35, 33; his dynastic stela about a hereditary prince must have been brought to Berenice from somewhere on the road to the Nile. (e) Wilkinson MSS.: XXXVIII, 58, 77, 80, with plan of Sikēt; XLV, D. 15, section of mine. (f) Brocchi, *Giornali delle Osservazioni*, II, 61-73, 75-81; 1823 journey, published 1841. (g) Letronne, op. cit. 1, 453; Atlas, pl. 16 (1-4), Sikēt. (h) Lepsius, *Denkm.*, Text, v, 349. (i) Blümner, *Technologie*, III, 239-43, with notes on classical references. (j) Floyer, op. cit. 57, 97, with photographs on pp. 4, 26, 47, 58, 102 and inset map on p. 39; *Geog. JRGs* 1, 418, 422, 425. (k) Golénisheff, *Rec. trav.* 13, 88, with pl. VI (1). (l) MacAlister, *Geog. JRGs* 16, 537, with map. (m) Fitzler, op. cit. 8, 48, 99, 118, 126-8, 130. (n) Ball, op. cit. 29-30. (o) Lesquier, op. cit. 418, 456. (p) Murray, *JEA* 11, 144-5, with pl. 15 (1); *Blackwood's*, 260, 385-8. (q) Hume, op. cit. II, i, 107 ff.; II, ii, 440, 493, 586, 642-4. (r) Bevan, *Egypt under the Ptolemaic Dynasty*, 155, with n. 1. (s) Lucas, op. cit. 446. (t) Porter and Moss, op. cit. 326. (u) PW, s.v. Smaragdus Mons (Kees and Honigmann); Metalla (Kiessling). (v) L. and S., s.v., shows the inconsistency of ancient references to *σμαράγδος*.

workers' houses and the mine-shafts tunnelled into the exposed veins are numerous everywhere, only the remains at Sikēt have offered evidence that can be discussed here. Its rock-excavated temple, hitherto called a Ptolemaic structure, is probably Roman. Greek inscriptions found by Cailliaud, Belzoni, Wilkinson, and Nestor l'Hôte at a second temple or shrine (with small Doric columns in its entrance, surmounted by arched recesses, all rock-cut) indicate exploitation in late Roman times. Cailliaud discovered Sikēt in 1816 and revisited it the following year, followed soon after by Belzoni in a spirit of considerable mistrust of his predecessor. Cailliaud left some highly glorified drawings of the main buildings, but Belzoni's are rather better. Wilkinson made a pencil drawing of the Wādī Nugrus settlement, as well as a plan of the Sikēt rock temple and a drawing of the two surviving recesses of the shrine where he noted the inscriptions. Beyond a section drawing of a mine by Wilkinson and a description by MacAlister of the many small tunnels, without supporting pillars, there is little or no information about the interior working of the beryl mines.

Judging by the varied style and quality of the wall construction in the workers' settlements, this area was worked at several different periods—Roman and early Arab, possibly Ptolemaic, but Lucas's evidence is conclusive against the use of the emerald or beryl in dynastic times. Despite the universal acceptance of the workings as being of Ptolemaic date, there is no proof of this, though Strabo's references make it possible. It has become customary, following all commentators of the Soterichos inscription¹ (Alexandria Museum, probably from Koptos), to say that the beryl mines were working in 130 B.C. under Ptolemy VII. This solitary inscription refers to an official appointed by the strategos of the Thebaid to supervise the safe transport of various goods from the hills of Koptos: ἐπὶ τὴν συνα[γω]γὴν τῆς πολυτ[ε]λοῦς λιθείας τὰ λιβανωτικὰ φορτία καὶ τ' ἄλλα ξένια. This is not a convincing reference to the beryl mines area and if we accept Wilcken's emendation to ξενι(κ)ά, the text will seem even less applicable to the products of the Eastern Desert itself.

At Berenice Wilkinson found among other things 'emerald stones', but, as already explained, the only hieroglyphic inscription there that seems to contain a possible reference to the beryl mines ('the land of the green stone') is of Roman date. We have already seen references to smaragdus mines as early as A.D. 11 (at Semnah) and A.D. 19 (at Hammāmāt).² In common with all others in the south, these mines were then under a (chief) overseer of mines, who also bore the title of *praefectus (montis Berenicidis)*, this area being extensive, reaching at least as far north as the Leucos Limen road. Later, from about mid-first century, the title of Prefect of Berenice seems to occur alone, without any reference to the direction of mines and quarries. He was under the orders of, presumably, the Prefect of Egypt, as the Afrodito inscription may show (see above, p. 99). The next inscribed date at Sikēt is above the entrance (two,

¹ Soterichos inscription: (a) *OGIS*, 132, with bibliog. references till 1903. (b) Breccia, *Iscrizioni*, No. 37. (c) Meyer, *Heerwesen*, 90 (n. 329). (d) Bevan, *op. cit.* 155 (repeats Mahaffy of the first ed.). (e) Wilcken, *Archiv.* III, 325. (f) Fitzler, *op. cit.* 49. (g) Martin, *Epistatèges*, 35, 62–64. (h) Rostovzeff, *Soc. and Econ. Hist.* II, 924; *Gnomon* 7, 21 ff. (i) Otto u. Bengtson, *Gesch. des Niederganges*, 214. (j) PW, s.v. Smaragdus Mons; Hippalos (Otto).

² Semnah: see *JEA* 38, 106. Hammāmāt: *OGIS* 660, *SB* 8580; Fitzler, *op. cit.* 126–8.

originally probably three, recessed arches) to the small shrine.¹ The end of the name of Gallienus was still readable in the early nineteenth century and the inscription includes a dedication to Isis and Apollo (preceded probably by Serapis). In A.D. 421 Olympiodorus, a native of Egypt, was invited to visit the smaragdus mines, not by permission of the emperor as sometimes stated (e.g. Fitzler, Lesquier and PW), but by the King of the Blemmyes, who for a time drove the Nobades from the territory south of the Roman frontier. The *Φοινικων* visited by Olympiodorus is unlikely to be the Ant. Itin. station on the Berenice road. The whole area, as well as that of Berenice (including the sand-covered remains of the ancient town), needs investigation.

Much has been omitted from these brief notes, including a host of details, unpublished, studied by Wilkinson, Burton, Scaife, and Tregenza (to their manuscript field notes the writer is throughout most deeply indebted); for example, construction details (baths, brick vaulting, guard huts, stone roofing, cement and plaster, hypocausts, small domed structures that may be pot and brick kilns, etc.), glass (some of it coloured and decorated), pottery² (including blue, black, white, and red glaze ware), rough art work on the spot (unfinished baths and sarcophagi, terra-cotta figurines, carved stone plates, unexplained polished stone discs, etc.), temple structure (entablature and pediment, sanctuary niches, altars, etc.), grave areas, inscriptions and ostraca (many still unpublished³ and some still undergoing study), unpublished Christian evidence,⁴ legions and cohorts at road stations and quarry settlements, details of ground-level aqueducts at Umm Diḳāl (between two hydreumata immediately south of Mons Claudianus, its length about a mile and its direction, still unexplained, apparently uphill towards a low pass), and, as already mentioned, at Tal'et el-Zerḳah and Ḳrēyah and probably at Abu Ḳrēyah, Nabataean graffiti⁵ (many still unpublished), the geology of rocks (including the varieties of Imperial Porphyry), quarryman's marks (plentiful at Mons Porphyrites⁶ and Mons Claudianus), the much-needed identification of Eastern Desert rocks, quarried by the Romans, in Rome and elsewhere,⁷ the use of slates (frequent and, in

¹ *OGIS*, 717, *SB* 8384; first record in Cailliaud, *op. cit.*, pl. VIII (3).

² Brief details for dating given earlier (*JEA* 38, 107 ff.).

³ Meredith, *Chron. d'Ég.* 55, 126-41, nos. 14-21 (Mons Porphyrites); those at Mons Claudianus, *ibid.* 56 (1954), nos. 22-40.

⁴ E.g. at Abu Darag; references by Littmann and Meredith, *BSOAS* 15, classical notes, pp. 26-27.

⁵ From the field notes of Wilkinson, Burton, Murray, Scaife, Tregenza, and Winkler, with a few (published) by Golénisheff, Cook, Green, Clermont-Ganneau, and Clédat. Now collected and publication in progress; Littmann and Meredith, *BSOAS* 15, 1-28, nos. 1-54, with pls. I-VII and map; *ibid.* 16 (1954), nos. 55-82.

⁶ Published by Meredith, *Chron. d'Ég.* 55, 136-7 (no. 10); those at Mons Claudianus will follow, *ibid.* 56, nos. 30 and 38; cf. Ward Perkins, *JRS* 41, 89 ff. (Tripolitania and Rome).

⁷ Since *JEA* 38, 101 was written, several identifications made with the co-operation of Mr. J. B. Ward Perkins in Italy and Mr. Michael Ballance in Italy and Istanbul, and with petrological work by Mr. P. M. Game: (a) certain; (b) probable, awaiting scientific tests. *Mons Claudianus quartz-diorite*: (a) Palatine; (b) Hadrian's Villa, S. Giov. Lat., Ostia. *Palatine (Domitian)*. *Mons Porphyrites red porphyry*: (a) Palatine (Nero and Domitian), Sabratha, Pompeii. *Mons Porphyrites black porphyry*: (b) Palatine (Domitian); possibly dark-red and mixed red-black varieties, Palatine (Nero), Herculaneum, Istanbul. *Barūd diorite*: (a) Palatine; (b) Palatine (Domitian), Istanbul. *Semna metagabbro*: (a) Hadrian's Villa; (b) Palatine (Nero and Domitian), Forum, S. Giov. Lat., Domus Augustana, Herculaneum, Pompeii. *Umm Towat felspar porphyry*: (b) possibly Istanbul. *Umm Balad diorite*: (b) Herculaneum, Pompeii, Istanbul. *Asteān red granite*: (b) Leptis (Severus and Caracalla); apparently none at Sabratha.

places, abundant, very rarely inscribed but apparently of late Roman date, as seen from one inscribed specimen and from quarry evidence.) Many stations, not named in these notes, are marked on the maps. Six road stations and quarry settlements, discovered since 1930, are all in the northern area (*JEA* 38, map on p. 95). Abu Darag¹ on the Red Sea coast, south of Suez, seems to be an early Christian monastery on the site of a Roman station.

To the many persons, named and unnamed in the present study, who have generously helped with material, advice and criticism, the writer expresses his profound gratitude. Photographs Nos. 1 and 3 were kindly supplied by Mr. G. W. Murray and Professor Cl. Préaux; No. 2 from the Winkler collection, by courtesy of the Egypt Exploration Society.

¹ Abu Darag: (a) Wilkinson MSS.: Envel. L (1826); XLV, D. 5, plan of scattered ruins. (b) Scaife, manuscript field notes; *Bull. Fac. Arts*, 4 (1), 63-4. (c) Littmann and Meredith, *BSOAS* 15, 11-14 (Nabataean graffiti, nos. 22-34, with pls. I-IV), 1 and 27 (classical notes).

BRIEF COMMUNICATIONS

On the Tale of the Doomed Prince

THE doomed prince, whose death is to be brought about by a snake, a dog, or a crocodile, is saved from the snake by his wife. But his own dog threatens him and he seeks refuge in the sea. There a crocodile captures him and tells him that in order to be released he must kill its enemy.¹ At this critical moment, the manuscript stops, leaving room for conjecture.²

The prince, who is in dire straits, can hardly refuse the deal, and if he succeeds, he will have warded off the second menace of Fate. Then there would remain only the threat of the dog whose pursuit was interrupted by the incident of the crocodile. The story-teller must have had reasons of his own for combining the two episodes.

But let us hear what Diodorus Siculus has to say: 'Some say that once one of the early kings whose name was Menas, being pursued by his own dogs,³ came in his flight to the Lake of Moeris, as it is called, where, strange as it may seem, a crocodile took him on his back and carried him to the other side. Wishing to show his gratitude to the reptile for saving him, he founded a city near the place and named it City of the Crocodiles; and he commanded the natives of the region to worship these animals as gods and dedicated the lake to them for their sustenance.'⁴

It has been pointed out that the story of the rescue of Menes is paralleled by the episode of the body of Osiris being carried on the back of a swimming crocodile, an episode which one source locates in the Fayyūm.⁵ The episode of the dog also may not be irrelevant within the framework of the Osirian legend, for the dog can represent Seth.⁶ The connexions between mythology and folk-lore are well illustrated by the Tale of the Two Brothers, and it is quite possible that close analogies could be found in the case of the Tale of the Doomed Prince. At the present moment, the legend preserved by Diodorus offers the best parallel for the last lines of the text and gives a worth-while suggestion for the lost part of the story.

G. POSENER


¹ For this interpretation of the last lines of the text, see Spiegelberg, *ZAS* 64, 86-87.

² These have been numerous, with supporters of a sad ending opposed to the champions of a happy conclusion, see Lefebvre, *Romans et Contes ég.* 114-18. Attempts previous to the article of Spiegelberg (1929) suffered from a wrong understanding of the end of the manuscript, and the weak point common to all essays is neglect of the resources of Egyptian folk-lore.

³ The theme of a herdsman attacked by his own dogs is known from *Odyssey*, 21, 362-5, and from the *Gilgamesh Epic*, 6, 66 ff., see Gordon, *AJA* 56, 93.

⁴ Diodorus, I, 89; English by Oldfather.

⁵ Lanzzone, *Pap. du Lac Moeris*, pl. VII; see Kees in Pauly-Wissowa, s.v. *Suchos*, 552-4; Maspero, *Hist. anc. des peuples de l'Orient Classique*, I, 235; Junker, *Das Götterdekret über das Abaton* (*Wien Denkschr.* 56, 4), 41-44, 79; Möller, *Die beiden Totenpap. Rhind*, 79; Gressmann, *Tod und Auferstehung des Osiris* (*Der Alte Orient*, 23, 3), 13-14.

⁶ In P. Jumilhac a dog is identified with Seth, cf. Vandier, *Rev. d'Ég.* 9, 121-3. Sethe, *Urgesch.* § 87, proposes to see a dog in the animal of Seth; see Kees in Pauly-Wissowa, s.v. *Seth*, 1898, and  Klasens, *A Magical Statue Base (socle Behague) in the Museum of Antiquities at Leiden* (Leyden, 1952), 41 (h 14), 105-6.

An early faience statuette of a baboon

THE figure which is here published, in half-size, for the first time, is, like so many antiquities, of unknown provenance. Any clue to its origin, date, and purpose must therefore be derived from the study of the comparable material. It is now in Copenhagen.



There can, at any rate, be little doubt that the object under discussion represents a baboon, and probably the cynocephalous baboon (*cynocephalus hamadryas*). The artist has allowed himself a certain amount of freedom in omitting altogether the rather prominent genitals of the animal and in humanizing the subject in certain ways, most noticeably in the treatment of the arms and in converting into the typical Egyptian wig the natural long mane. The beast is shown squatting in an attitude of relaxation and holding his snout in a peculiar but unexplained gesture, with the ribs clearly marked in paint on its back.

The statuette's core of powdered quartz is coated with a thin layer of blue vitreous glaze with the details superimposed in a dark purple almost indistinguishable from black. The glaze has in parts (e.g. on the base) fully preserved its original brilliancy of colour. The distinctively individual treatment in the modelling and the character of the glaze and painted decoration suggest that the statuette, though apparently unique of its kind as regards the subject-matter, belongs to a well-known class of objects of Twelfth Dynasty date. The latter is most frequently represented by figures of hippopotami in various positions and often not devoid of the inspiration peculiar to the less formal Egyptian *objets d'art*, though of doubtful purpose.¹

This is likewise the case here. The baboon being a sacred animal, its image is unlikely to have been a hunting-charm, even if this were true of those of hippopotami, which is doubtful; nor is there any evidence for the consumption of simians—an unsavoury dish by all accounts—prior to that of a butcher's shop in ancient Rome.² More reasonably altogether, one might refer to the 'love of *singerie*' which, according to C. Aldred (*New Kingdom Art in Ancient Egypt*, 64), was a 'characteristic rococo feature' of the late Eighteenth Dynasty. Regarding the faience statuette in question this is

¹ Cf. the study of a hippopotamus recently acquired by the Boston Museum in *Bull. M.F.A.* 49, 98 ff., by B. V. Bothmer, who also quotes the literature.

² See O. Keller, *Antike Tierwelt*, 64.

probably an anachronism, but one which suggests what is perhaps the most plausible explanation of its *raison d'être*.

In the discussion of this and similar objects of the Middle Kingdom such as the celebrated hippopotami it is not altogether advisable to confine oneself to any one particular subject of representation. An exhaustive catalogue of the material, however desirable, is here out of the question and, moreover, does not lie within the scope of the present writer, who merely wishes to draw attention to a fine and rare specimen. There are, nevertheless, a number of faience figures obviously akin to and contemporary with the baboon, such as that of a stalking cat, which is known to him from an illustrated booklet of the Metropolitan Museum, which can be compared to advantage.¹ These prove the existence at the period of objects of *vertu* produced with no further thought than to delight the eye. Moreover, it is known that monkeys were kept as pets at least as early as the Eleventh Dynasty, when they were imported for that purpose from Nubia.²

The only alternative, which cannot be entirely ruled out, is to regard this baboon as an image of the god Thoth, whose statues in the form of seated cynocephali are known from predynastic times onwards, when they were already made of faience as well as of other materials.³

MANFRED CASSIRER

A New Kingdom head from Faras

THE head shown in the figure below has been for many years in the Khartoum Museum, where it bears the number 5829.⁴ It came from Faras but is nowhere mentioned in the publications of that site. Examination of the full typescript tomb list of the Meroitic cemetery⁵ shows that it was found in the filling of grave 2340. This grave was of normal Meroitic type, but there is nothing strange



in the occurrence of a head of New Kingdom type in the fill. New Kingdom occupation of the area is well proved by the existence of fragmentary remains of Eighteenth and Nineteenth Dynasty temples.

¹ See *Ancient Egyptian Animals*, no. 23 (a late baboon in a similar position is shown in no. 1).

² Ibid. H. Schaefer, in discussing some M.K. statuettes of animals (in *Kunst d. alten Orients*, 61), admits the existence 'der harmlosen Freude am Bilden ohne religiöse Gedanken'.

³ Cf., e.g., Quibell, *Hierakonpolis*, 1 (passim). A good specimen in stone is in the Berlin Museum; cf. Schaefer, op. cit. 182. None of these baboons are shown holding their snouts.

⁴ I am indebted to Miss R. Moss for drawing my attention to this piece.

⁵ Copies exist in the Griffith Institute and in Khartoum.

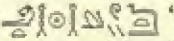
The head is of steatite and is 7.7 cm. high, the photograph showing it a little under natural size. It is of a royal figure wearing the *Kheperesh* crown and has been considerably battered.


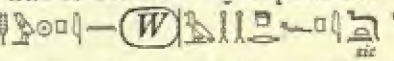
There is no inscription to help in the attribution, but the cemetery in which it was found is round the area of a temple from which blocks with the name of Tut'ankhamūn have been found. This gives a clue to the identity of the king portrayed—although much damaged the resemblance to Tut'ankhamūn is sufficiently clear for it to be assigned to him with some confidence.


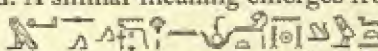
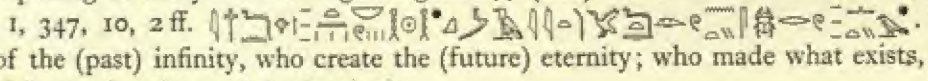
P. L. SHINNIE


Nhh and *dt* reconsidered

IN her article on *Die Ausdrücke für 'Ewig' im Ägyptischen*¹ Gertrude Thausing has discussed at length the distinction between *nhh* and *dt*. She concluded that both mean 'eternity', but that *nhh* refers to the time aspect and *dt* to the spatial. This communication is intended to suggest that the distinction may be of another kind.

The suggestion first occurred to me after studying the title of the Cairo Calendar of Lucky and Unlucky Days²  'The beginning of *nhh* (and) the end of *dt*'. In this phrase the use of the words 'beginning' and 'end' prompts the idea that *nhh* connotes the concept of infinity associated with the time *before* the world, as we know it, and its life came into being, whereas *dt* refers to the other infinity which we associate with eternity, that is the time when the temporal world comes to an end.

That this distinction seems possible is borne out by the writing of *nhh* as well as of its associations. Miss Thausing rightly calls attention to the writing  in the *Buch von Durchwandern der Ewigkeit* and to the oft-recurring title of Osiris *nb cnh* as parallel to *nb nhh*.³ This association is strikingly confirmed by *Pyr.* § 412a  'Nhh is (the beginning of) the lifetime of Onnos, while *dt* is his end'. In other words Onnos, like the gods, has come into existence when the earth was still unknown, and his end is also infinite in the sense that it continues until the end of the world, which is never. Sethe takes the sentence differently.⁴ 'Der Tote', he says, 'ist räumlich und zeitlich absolut unbeschränkt', and his interpretation seems to be followed by Miss Thausing.

A similar distinction is invited by a sentence in the *Book of the Dead*, ch. 110, 14: 'Nhh is completed and *dt* is taken possession of.' Here there is a clear implication that *dt* follows *nhh*, cf. also the regnal dating formula:⁵  'Year 1, beginning of *nhh*, receiving of *dt* and celebrating millions of *hb-sd* festivals.' The meaning seems to be that such festivals, which occur in the first year of the king, are known to be traditionally celebrated from the very beginning of existence until the end of the world. A similar meaning emerges from a quotation which Dr. Schott has kindly communicated to me:  'Bringing offerings for the opening of the year: the beginning of *nhh* (and) the end of *dt*'.⁶ Of more interest is *P. Leiden*, 1, 347, 10, 2 ff.  'Hail to you, Lords of the (past) infinity, who create the (future) eternity; who made what exists, and who are bringing forth what does not (yet) exist.'

Miss Thausing has also pointed out⁷ that there is a falcon-god called  who is represented as a falcon with the sun-disk over his head. She also mentions⁸ that one of the attributes of Rē is

¹ *Mélanges Maspero*, 1, 35 ff.

² See *Ann. Serv.* 48, 425-31; for *hst nhh* see also Schott, *Altäg. Festdaten*, 947, Tab. 16.

³ See note 1 above, p. 39.

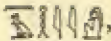
⁴ *Pyr. Üb. Komm.* 11, 170.

⁵ *ZAS* 66, 3.

⁶ Theban Tomb, 96 A, hall, west wall, south side, copied by Davies. Dr. Schott also mentions that there are many examples which support my point of view.

⁷ *Op. cit.* 40, 3.

⁸ Cf. Kees in *Rec. trav.* 36, 9.

¹ whereas a god with the *atef*-crown and beard represents *dt* and presents *dt* to the king.² This confirms the association of *nḥh* with the state of affairs before the creation of the world, since *Rē* according to the Heliopolitan doctrine existed in the beginning; and so *nḥh* is connected with the idea of the creation of life and is written occasionally, as we have seen, with the *cnḥ* sign.³ It should be noted that *nḥh* is never written with the earth sign which occurs so often with *dt*. Perhaps the writing of *dt* in this way indicates a connexion with the created world. In that case, the phrase *pr n dt* 'estate' would mean 'the eternal estate', i.e. the estate belonging to the eternity after death.


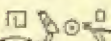
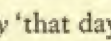






It is of interest to note that *cnḥ* when used of a wish in the formula referring to the future life is found with *dt* only, and never with *nḥh*. It is true that *nḥh* sometimes follows *dt* in this expression,⁴ but the regular precedence of *dt* suggests that this is the word which refers to the life after death. If in such a phrase *nḥh* alludes to the infinity in pre-existence, why does it not precede *dt*? The answer is that the phrase *cnḥ dt* has become a stereotyped formula so firmly fixed that any addition to it will naturally follow *dt*.⁵

In time, it is true, the distinction seems to have become atrophied. This is suggested by the fact that the terms seem occasionally interchangeable in position and meaning, e.g. *hwt nt nḥh* and *hwt nt dt*⁶ as well as the fact that the Coptic *eneq* means 'eternity' in general.





Originally, then, *nḥh* may well have meant the infinity (Arabic *الابد*) before the existing world emerged, in which infinity the creation of life occurred; while *dt* referred to eternity (Arabic *الآل*) in the sense which is more familiar to us and which excludes the idea of infinity in pre-existence—it pointed rather to the eternity which follows on death.




ABD-EL-MOHSEN BAKIR

A new approach to Middle Egyptian demonstratives

IN his treatment of 'demonstratives' Sir Alan Gardiner,⁷ like other grammarians of Middle Egyptian, uses the terms 'epithets' and 'pronouns' to describe these words in divergent positions and apparently divergent syntactical usages. He states, for example, that  *pf* may precede or follow the noun to which it is attached, or may even stand by itself as a 'virtual neuter'. The phrase  *hrw pfy* 'that day' is taken by him to exemplify *pf* as an epithet; similarly  *pf gs* 'that side', although such a phrase contradicts the usual position of an epithet. In the sentence    *rh-l pf: r pn* 'I knew that from this' he would explain *pf* and *pn* as pronouns, as also the use of  *pw* as subject. When  *nn* occurs with  *n* and a plural noun, or with a plural noun without *n*, it invariably precedes its noun and does not agree with it in gender and number; *nn* may also stand by itself in a neuter sense: in all these cases *nn* is described by Gardiner as a pronoun.

Such a variable terminology, involving divergent rules as to the position of the demonstratives, leads inevitably to confusion. It may be that the attempt to explain the phenomena in terms of Indo-European grammar is the reason for this confusion. At any rate, it may be suggested that an explanation according to the terminology of a Semitic language like Arabic can clarify and simplify the usages involved. These demonstratives, so regarded, are nothing but *substantives* placed in apposition, explicative to the substantives with which they are associated. In such relation they must agree with their nouns in gender and number.⁸

¹ In Kees's article loc. cit. the text runs as follows:    .

² Referring to the preceding note, the text reads:   .

³ Cf. Latin 'aevum'.

⁴ See *Wb.* II, 301.

⁵ Compare such phrases as *u-hq-sn* 'their white bread'—see *Eg. Gramm.* (2nd ed.), § 94.

⁶ *Wb.* III, 2.

⁷ *Eg. Gramm.*² pp. 85–86.

⁸ Cf. W. Wright, *Grammar of the Arabic Language*, II (ed. 1951), § 136 (b), p. 277.

In this light *hrw pfy* would mean literally 'the day, namely that (one)', Cf. Hebrew: הַיּוֹם הַזֶּה 'this man, i.e. the man—this (one)'.¹ *Pfy* here is in apposition to *hrw*. Again *pf gs* would mean 'that (one), namely the side', where *gs* is in apposition to *pf*. In the sentence *rh-i pf; r pn*, the words *pf* and *pn* will then be regarded as substantives with demonstrative implications. As regards *nn*, it is also a substantive which is joined genitively, directly or indirectly (by *n*) to the following noun. In the same way, when *pw* and *nn* are used independently as subjects or predicates, they are likewise substantives.

It is interesting to note that even the Arabic definite article الـ *al* had originally the force of a demonstrative, like its Egyptian equivalents *pr*, *tr*, *nr*.²

It may be argued that all this is merely a matter of terminology, but it must be admitted that it not only obviates the confusion in the present grammars but is a more coherent and simple explanation. Perhaps it will not be amiss to suggest that an approach to Egyptian grammar along the lines of Arabic classifications and nomenclature would be generally fruitful and enlightening.³

ABD-EL-MOHSEN BAKIR

The hieroglyph 𓪓

THERE is some disagreement about the object represented by the hieroglyph 𓪓. Horapollon, *Hieroglyphica*, 2, 4, saw in it 'heart and windpipe'; Gardiner, *Eg. Gramm.*² Sign-list, F35, gives the same description of the sign and states 'For unknown reasons, phon. *nfr*'. Erman in the Sign-list to his *Grammatik* shares this opinion, while my teacher, Professor Czermak of Vienna, described it in his lectures as 'heart with oesophagus'.

From an anatomical point of view, I think such combinations as 'heart and windpipe' or 'heart and oesophagus' seem improbable. Instead, the following possibilities may be taken into consideration: (1) heart with aorta and veins; (2) lung and windpipe; (3) stomach and oesophagus. It is difficult to believe that (1) could be the true interpretation of 𓪓, for the ideogram 𓪓 'heart' shows the aorta at the right and the *arteria pulmonalis* on the left, both of course truncated, while on the top is part of the *venae pulmonales*, see my article 'Untersuchungen zum Königsnamen Adiebis' in *Archiv f. Äg. Arch.* 1938-9, p. 174; for detailed representations of 𓪓 see Griffith, *Hieroglyphs*, pl. 4, No. 46; pl. 9, No. 166.

The second combination 'lung and windpipe' may equally be excluded, since these parts of the body are represented by the sign 𓪓, cf. *zmr* 'lung', Ebers, 99, 13. It seems to me, therefore, that the correct interpretation must be the third possibility, 'stomach and oesophagus', but with the reservation that the oesophagus was probably in ancient times confused with the windpipe, and interpreted as the latter.

The windpipe is likened in many languages, as one would expect, with a tube, a pipe, or a flute, cf. German *Luftröhre*, i.e. 'air-tube'. In Armenian *þoğ* (փող) stands on the one hand for 'throat' or 'gullet' and on the other for 'tube' or 'trumpet'. Persian *qaṣabatu rriṣa* (قصبۃ الریة), of Arabic origin, is literally 'cane of the lungs'. Arabic *šibāba* means 'flute', but obviously belongs to the same stem as Coptic ⲙⲉⲧⲱⲃⲉ (B.) 'throat' (from original **šibābat*), Late Egyptian 𓪓𓪓 *šbb*. The above considerations lead me to suggest that in very early Egyptian there was a word *nfr* meaning 'windpipe' related to Arabic *naṣīr* 'trumpet', which may perhaps originally have meant 'tube'; in this case 𓪓 *nfr* 'windpipe' will belong to the company of vanished words like 𓪓 *idn* 'ear'; 𓪓 *cyn* 'eye'; 𓪓 (*i*)*d* 'hand',

¹ See A. B. Davidson, *Hebrew Grammar*²⁴ (Edinburgh, 1932), p. 47.

² Cf. *Eg. Gramm.*² § 112.

³ Such an approach has been attempted by the present writer in his forthcoming introduction to Middle Egyptian Grammar.

and 𐤊𐤍𐤔 *ḵnd* 'baboon', which so far have not been found in Egyptian texts, but which must once have existed in an early period of the language, and which still occur in related Semitic tongues, as in Arabic *'uḡn* 'ear', *'ain* 'eye', *yad* or *īd* 'hand', and *ḵird* 'monkey'.

W. VYČICHL

Air channels in the Great Pyramid

IN his review of Edwards' *The Pyramids of Egypt*, Chatley mistakenly states (*JEA* 34, 127) that the southern air tunnel of the King's Chamber, Great Pyramid, 'enters the chamber at floor-level'. Both northern and southern tunnels actually enter 3 feet above floor-level (Perring, *The Pyramids of Gizeh*, Pt. I, p. 4), a distance readily seen within the room itself, of course. As Chatley notes, Sirius could never have been observed through the southern channel, but it will perhaps be of interest to review the reasons more specifically than he does. Both channels enter the walls of the King's Chamber horizontally and continue this direction for about 5 feet before turning upward (Perring, *op. cit.*, pl. 3, fig. 2); the diagonal of neither channel is a straight line, the southern 'curving more than its own width to the east' (Petrie, *Pyramids and Temples of Gizeh*, 1st ed., p. 84), the northern cutting even farther toward the west (Perring, *op. cit.*, pl. 3, figs. 1-2); as Chatley observes, the outer end of the southern channel—and presumably of the northern as well—was not square with the face of the pyramid originally, for it turned abruptly to run parallel with the ground for approximately the last 10 feet, 'probably', Perring believes (*op. cit.*, p. 2, pl. 4, figs. 5-6) 'with the view of preventing the sand from choking it up'. Petrie (*op. cit.*, 70-71) found the air tunnels in the Queen's Chamber were 'exactly like the air channels in the King's Chamber in their appearance, but were covered over the mouth by a plate of stone, left not cut through in the chamber wall; no outer end has yet been found for either of them . . .'. However, a telescope did show him 'something like the mouth of a hole in the 85th course on the S. face', but he was 'hindered from examining it closely'.

ELIZABETH THOMAS

The beginning and the date of P.Ryl. IV. 586 (Plate I)

IN view of the interest to palaeographers of precisely dated specimens of bookhands or near-bookhands, it is worth recording that confirmation has now been found of the date indicated for the careful round letters and broad serifs of the hand of this document. The name Simaristos occurring in the briefly described P.Oxy. 802 suggested the possibility that this text was part of the Rylands document. A photograph obtained through the kind offices of Professor Gerstinger from the University library in Graz, where the papyrus is now housed under the inventory number P.Graz I 1933, reveals in fact the top left-hand corner of the Rylands papyrus, of identical handwriting, and making an actual join with it. Its prescript is of Ptolemy Alexander and Berenice, dated by its form as not earlier than 101 B.C., and by the word δεκάτου at the beginning of a line to not later than their nineteenth year, a *terminus ante quem* which P.Ryl. I. 12 advances to their sixteenth year. Now the first four lines of P.Graz are written in the small cursive found also in P.Ryl. lines 5 and 10, and seem to have been longer in number of letters (l. 1, 42; l. 3, 39; l. 4, 29-31) than are the lines from l. 5 on, where the large round capitals of P.Ryl. begin, in a line averaging twenty-nine letters. In the prescript therefore only [ἐκκαλ-] | δεκάτου is short enough to be acceptable as a restoration if lines 1-3 were of even length. This suits the other data admirably: the loan therefore was made in Apellaios = Phaophi 99 B.C., to be repaid later during the same regnal year. The assignation of the text to the Arsinoite nome, inferred from a false interpretation of Ἀφροδίτης in P.Ryl. I. 2, is shown to be wrong, for the provenance is Oxyrhynchus. Possibly Ἀφροδίτης in some way describes the κοινόν or association from which the loan was made.

The text of P.Graz I 1933 (P.Oxy. 802) is as follows:

Βασιλευόντων Πτολεμ[αίου τοῦ καὶ Ἀλεξάνδρου θεοῦ]
 Φιλομήτορος καὶ Βερενίκη[ς θεᾶς Φιλαδέλφου ἔτους ἑκκαί-]
 δεκάτου, τὰ δ' ἄλλα τῶν κοινῶν ὡς ἐν Ἀλεξανδρείαι]
 γράφεται μηνὸς Ἀπελλαίου [Φαῶφι]
 5 ἐν Ὁξυρύγχω(ν) πόλει τῆς [Θηβαίδος · ἐδάνεισαν]
 Σιμάριστος Δημητρίο[υ 9-11]
 οὔ Λάκων καὶ Δίδυμ[ος Μακε-]
 δὼν Δημητρί[ου Πέροισι τῆς]
 ἐπι[γόν]ῃς [·]...[
 10]...[
]τη[

1. Cf. e.g. P.Teb. 106, 3; SB 4623.

5. If ἐδάνεισαν is correctly restored at the end, this line is about five letters longer than the normal as established from the Rylands text.

7. The first letter might be θ but not φ (i.e. not part of e.g. χρηματο-) | φυλάκων.

9. P.Graz and P.Ryl. join along this line. As far as can be ascertained from photographs of the two documents, ἐπιγόνῃς . . . [should be read.

10. From the two fragments together only the reading Ἀφροδίτης . . . [is confirmed, and Βε[is very unlikely.

11. ἀπὸ τοῦ συστή[seems a probable reading of the combined fragments, in which case συστή[ματος is one possible restoration. σύστημα, not as yet found as far as we know in Egypt, in the Aegean and Asia Minor denotes a club or committee of a club (see Poland, *Gesch. gr. Vereinsw.* 158). The sense might be reached here by some such restoration from the end of l. 10 as ἐπακολουθούντων (or similar word) τῶν] ἀπὸ τοῦ συστή[ματος ἐκ τῶν ἐπι]κοινῶν χρημ[άτων.

C. H. ROBERTS and E. G. TURNER

ΑΓΑΠΗ in *The Invocation of Isis* (P.Oxy. xi. 1380)

THE centre of discussion in this much-discussed word (for a recent and full citation of the evidence see A. Ceresa-Gastaldo in *Aegyptus*, 31 (1951), pp. 296 ff.) revolves round the question whether any certain pagan use of the word can be cited in which Jewish or Christian influence cannot be suspected. The most important, if not the only, instances occur in *The Invocation of Isis*, a text whose composition 'can hardly be placed later than in the first century' (introd. to P.Oxy. 1380, p. 191), though the papyrus itself was written in the subsequent century. One instance which is adduced in l. 28 is clearly doubtful (ἀγάπ[ην]); other supplements are possible, e.g. ἀγάπ[ησιν], if none very probable. In ll. 109-10 Grenfell and Hunt read ἐν Ἰταλία ἀ[γά]πην θε[ω]ν. In 1927 G. Manteuffel published some new readings of the papyrus (*Revue de Philologie*, 51 (1928), pp. 161 ff.) which subsequent scholars have often accepted, presumably for no better reason than that they were published later than the *editio princeps*. In this passage he proposes to read ἐν Ἰταλία α[·]...την αβ[ρο]λον (emending α[γά]πην to ἀ[γά]θην). This reading offends against the all but invariable rules of word-division (as Manteuffel himself observes) and, in my opinion, finds no support in the papyrus itself. I have re-examined the papyrus (now Bodleian MS. gr. b 16 (B)) and have no doubt that Grenfell and Hunt's original reading was correct; if anything, it errs on the side of caution in marking the first α of ἀ[γά]πην as doubtful. I should conclude, firstly that here is an indubitable use of ἀγάπη in a pagan text of the first century A.D. and, secondly, that those who set out to correct Grenfell and Hunt do so at their peril.

C. H. ROBERTS

Radiocarbon dating

A METHOD recently brought into use for estimating the age of material which once formed part of living matter, has yielded some interesting results in regard to Egyptian dating.

Briefly, the underlying principle is as follows:

The earth is continually being bombarded by cosmic rays, which convert ordinary carbon (atomic weight 12) of carbon dioxide into another form of carbon (atomic weight 14) which is radio-active and gradually disintegrates. The amount of radiocarbon present in the atmosphere is roughly equal to that expected if it was mixed throughout all living matter, and if the cosmic rays had been constant in intensity over the last few thousand years.

When an organism dies, no further radiocarbon is added and the amount present in the dead organism will gradually disintegrate according to a known law. After about 5,600 years (the 'half-life period') the amount will be reduced by one-half. Thus, by determining the proportion of radiocarbon present in a specimen of wood, for instance, the period that has elapsed since the death of the tree of which it formed part, may be estimated. Plant material and wood, charcoal, antler, burnt bone, dung, and peat have been found useful. Great care must be taken to prevent contamination by substances likely to affect the results.

The method is being applied to the dating of prehistoric sites such as the recently discovered cave at Lascaux, S. France, where carbon from an occupational level yields an age-date of 15516 ± 900 years.

The following are the results obtained from some specimens from Egypt:

<i>Material</i>	<i>Source</i>	<i>Approximate known age</i>	<i>Radiocarbon age</i>
Acacia wood	Tomb of Djoser	4650	3979 ± 350
Cypress wood	Tomb of Snofru	4575	4802 ± 210
Wood	Ptolemaic coffin	2280	2190 ± 450
Funerary ship	Tomb of Sesostriis	3750	3621 ± 180
Wood from roof beam	Tomb of Hemaka, Vizier	4900	4883 ± 200
Wheat and barley grain	Fayyûm A	..	6095 ± 250
Charcoal from house floor	El-Omari	Mid-Predyn. (?)	5256 ± 230

With the exception of the Djoser specimen the results are in good agreement with the generally accepted dates. Further tests, especially on First Dynasty material, will be awaited with interest by Egyptologists.

I am indebted to Professor Richard A. Parker for a copy of a brochure on Radiocarbon Dating (*American Antiquity*, 17, no. 1, Pt. 2, July 1951) to which he contributed, and from which the above details have been abstracted.

R. W. SLOLEY

An Arabic Chrestomathy

THE editor has kindly allowed me to call attention in the *Journal* to a book which, because it is published in Egypt, might escape the notice of some scholars likely to be interested. Published by the Al-Maaref Press at Cairo for the Royal Society of Historical Studies, it is by the well-known Arabist, Dr. Adolf Grohmann, now Professor of Muslim History and Archaeology at the Fouad I University, and bears the title *From the World of Arabic Papyri* (1952, pp. xxii+262, 16 plates and a table showing the development of Arabic script in papyri of the first century after the Hegira). There is a foreword by Prof. Shafik Ghorbal-Bey.

The volume may be described as combining, for Arabic papyrology and on a smaller scale, the functions of Mitteis and Wilcken's *Grundzüge* and *Chrestomathie*. Part I, pp. 1-109, corresponds with the

Grundzüge, but, unlike that work, it does not deal with the history and administration of Egypt but confines itself to the palaeography and diplomatic of papyri. It is, for this sphere, extremely full and informative. Beginning with an interesting and useful list of Arabic texts on papyrus, and a map showing the places in which they were found, followed by a more detailed one of the Fayyūm, it goes on to describe the process of manufacture, and then deals very fully with other materials than papyrus, the pens, the ink, the styles of writing, and the language of the Arabic papyri. It concludes with rules which should be followed in editing such papyri, rules which necessarily differ in some details from those accepted by editors of Greek texts on papyrus. These rules, which will be found extremely useful by budding editors, are highly to be commended.

Part II is the Chrestomathy, a selection of texts illustrating life in Arab Egypt and historical events there. Many of these have previously been published elsewhere, but some are newly edited. Many are, of course, drawn from the Rainer collection and from the Egyptian Library. Some are Greek or bilingual (Greek and Arabic), like PERF 558, of the year 22 A.H. (= A.D. 643), and PERF 556, a document issued in Greek by 'Amr himself (*Ἀμβρος σὺμβ(ου)λ(ος)*). The documents selected include many which are of exceptional interest, and the whole volume is a most welcome addition to the resources of Arabic papyrology. It should be extremely valuable to all teachers and students of the science and of the earlier history of Egypt under the Arabs.




This is not a review but intended merely to call attention to the volume, but a few notes on particular points may perhaps be allowed. On p. 14 Grohmann speaks of the harm that may be done by the formation of crystals. They are often destructive to ostraca (Grohmann's suggestion for the treatment of these is sound), but do they often cause serious damage to papyri? I have seen them form there but do not recollect having ever had serious trouble with them. In note 102 (p. 220) Grohmann mentions a Coptic document with a complete Byzantine protocol at the *end* of the roll. That must be almost unique; it looks as if the roll had been reversed before use, i.e. as if the blank roll had been re-rolled with the protocol at the end. But in *P. Lond.* 1419, a codex, the protocol was in the *middle* of the volume (see p. vii of *P. Lond.* IV). On p. 114 the translation of the (Greek) endorsement of the document, 'to the Magaritai and others, *moving upwards on account of the public taxes*', is open to objection; it should read 'who came up to collect the public taxes'. I doubt also the rendering of l. 4 of the next document (pp. 115 f.), 'send this man to a reserved place, and *do not trouble this place by (billetting) others (but Amir)*'. I should prefer 'and do not burden (one) place in lieu of another', i.e. it is a warning against local favouritism. Grohmann's description of this document on p. 131 as a receipt is rightly corrected in a note on p. xiv; it is indubitably an entagion. The Arabic is dated, according to Grohmann's translation '[yea]r ninety o[n]e'. In the Greek text the date is given as *εἵκοσις* *ζα* with *πη* written above, and Grohmann renders 'the year 91-88'. What does this double date mean? Has *πη* been corrected to *ζα* or *ζα* been erroneously altered to *πη*? I cannot myself see any such reading in the facsimile (plate XIb). What I see there, and the oftener I look at it the clearer it seems, is *μη*, perhaps with a line over or through it. The trouble is that year 48 does not suit either the Arabic or the indiction, which is clearly the 8th. Year 48 A.H. should according to my calculation begin in A.D. 668, and the nearest 8th indiction to that is A.D. 664-5. Perhaps the apparent *μη* in the facsimile is an illusion, such as a facsimile may sometimes produce, but it would be interesting to have Prof. Grohmann's comments and to know how he understands his double date *ζα μη*.

H. I. BELL



NOTICES OF RECENT PUBLICATIONS

Supplément aux Annales du Service des Antiquités, Cahier No. 17. Tableau des Parties du Corps humain mentionnées par les Égyptiens. By GUSTAVE LEFEBVRE. Cairo, Institut français d'Archéologie orientale, 1952. Pp. 73.

The words discussed in this volume are grouped under eight general anatomical headings. This arrangement is convenient for most purposes and results in no difficulty in the identification of a term, the anatomical position of which may be unknown to the student, because every word is listed in alphabetical order in a comprehensive Index giving references to the particular section or sections of the book in which the term is discussed: Under each word important variations in spelling are noted, and the Coptic derivative and, wherever possible, the precise meaning are given. References to fuller discussions and textual references are generally relegated to footnotes.

Although the author, with typical modesty, disclaims any pretence of completeness for the book, some two hundred and thirty terms are included and it is hard to believe that the number is capable of being substantially augmented. His list of sources shows that he has cast his net far wider than the medical documents and has drawn his material also from the principal religious and magical texts. Among the very few omissions which the reviewer noticed are two words mentioned in the *Onomastica* II, p. 244*, namely,  (var. ) 'kidney', and , an abdominal term the exact significance of which is still obscure, both of which are well attested in texts of the Late Period. Professor Lefebvre treats the word *hn* in its recognized senses of 'head' and 'chest' and mentions the possibility of a further meaning, 'stomach'. An unpublished papyrus in the British Museum (No. 10321, rto. ll. 24-27), in which the god promises to keep in health the owner's 'kidneys (*grt*), intestines (*mht*) and his entire *hn*', throws some interesting light on this suggestion, for the sense requires that it should mean, not 'stomach', but the abdomen as a whole. Another occurrence of the word in a document of a similar purport in the Cairo Museum (No. 58035, published by W. Golénischeff in the *Cat. gen. Papyrus hiératiques*, 216 ff., and by A. Mariette, *Papyrus Boulaq*, II, pl. 57, ll. 75-78) implies that it had an even wider significance. In that instance the god promises to preserve the health of the owner's 'body (*hrt*), limbs (*rt*), and his entire *hn*'. Perhaps the best rendering of the word in that context is 'frame'. In view of all the available evidence it appears, therefore, that *hn* could be used either in a limited sense of certain individual members—the head, chest, and abdomen—each of which comprised several organs, or in a wider sense of the body as a whole.

In his treatment of the three words *ibhw*, *nhwt* and *tsot*, the author points out the probable connexion between *nhwt* and *ndht*, 'tusk' (of an elephant), and he accepts the meaning 'molar' although 'canine teeth' would seem preferable. 'Molars' would be a more suitable rendering for *tsot*, 'bound ones'; molars are indeed often called 'double teeth' by the layman at the present day. Perhaps the distinction between these three words was not always observed in usage, but in some instances, at least, the words *nhwt* and *tsot* possessed specialized meanings.

The only word for 'toe' given in this vocabulary is *sh*, but *dbt* is also well attested in texts of the Late Period. An unpublished papyrus dating from the Twenty-first-Twenty-second Dynasties in the British Museum (No. 10083, rt. ll. 9-10) mentions the expression   'the ten toes of her feet'. The same meaning is preserved in Coptic (τινίκε).

In the Preface to his *Ancient Egyptian Onomastica*, Sir Alan Gardiner expressed the hope that Egyptologists would endeavour to lay the foundations of a new dictionary by the publication of specialized vocabularies consisting of words which occurred in texts or classes of documents to which they had devoted particular study. Professor Lefebvre, by compiling a vocabulary of anatomical terms, has taken a practical step towards the fulfilment of this wish and has rendered a most valuable service to all students of the Egyptian language. How often readers of medical texts, and indeed of many other documents of more general content, must have turned to the Berlin dictionary in vain for the precise meaning of a word denoting a part of the

body! The growth of knowledge in this direction has certainly been considerable since the dictionary was published, but the information is scattered over a large body of scientific literature and is consequently sometimes difficult to locate. If the author had done no more than to codify the sources of information hitherto available he would have produced a very useful work of reference; the book, however, also embodies the fruits of his own extensive researches, and its value is correspondingly enhanced.

I. E. S. EDWARDS

The Wilbour Papyrus, edited by ALAN H. GARDINER: Vol. I, *Plates*; Vol. II, *Commentary*; Vol. III, *Translation*; Vol. IV, *Indexes*, compiled by R. O. Faulkner.

This monumental and sumptuous publication has been made possible through the generosity of the Trustees of the Brooklyn Museum. It is indeed a fortunate circumstance that the Wilbour Papyrus should have fallen into such hands, and that its editing and the task of interpreting the special and difficult problems it contains should have been entrusted to Sir Alan Gardiner. For the Wilbour is no ordinary text, and Gardiner justly acclaims it as 'one of the most important of non-religious papyri of Pharaonic date'. The papyrus provides us with a mass of new data concerning economic and social conditions in Ramesside Egypt and, in conjunction with Gardiner's commentary, is a veritable mine of information on Egyptian topography, local cults, personal names, and many other matters. Its publication undoubtedly brings us an important step nearer the day when at last it will be possible to produce a real economic history of Pharaonic Egypt.

Volume I contains photographs of the whole papyrus and hieroglyphic transcriptions in Mrs. Smithers' beautifully clear and regular hand. The kernel of the whole work, however, is Gardiner's commentary that forms the second volume. It is impossible in a few words to give any adequate idea of the scope and nature of this massive commentary, which undoubtedly will and must form the firm foundation of those additional researches that will be necessary before all problems of interpretation are solved. The translations in the third volume are mainly the work of Faulkner, who is also entirely responsible for the compilation of the exhaustive and exceedingly valuable indexes that form the fourth and final volume.

The Wilbour Papyrus consists of two documents, A and B, of unequal length, which are concerned entirely with a sort of cadastral survey of a continuous portion of Middle Egypt extending roughly from Medīnet el Fayyūm in the north to a place a little to the north of Minia. Text A, the larger document, records assessments and measurements of land made over a period of about three weeks in the months of July and August in the fourth year of Ramesses V. It is divided into four sections in which the various plots are treated in roughly geographic order, subject to grouping under the hierarchic order of the great land-owning institutions. It is not, therefore, the surveyors' actual field book, but a compilation therefrom made in an office. It is a record of various kinds and qualities of land, their owners and cultivators, and the assessments for taxation. These assessments are for the greater part of two kinds, 'apportioning' and 'non-apportioning', the discussion and elucidation of these occupying about half of the commentary (pp. 55-59; 65-108). Text B was apparently written somewhat later than Text A, covers approximately the same ground, but is much shorter, and is occupied exclusively with details concerning 'Khato-land of Pharaoh'. The entries in Text B are clearly of two kinds: the majority are normally written entirely in black ink and usually only contain one measurement or indication of area and no other apparent hint of why they are recorded. Others, however, are distinguished by being normally marked by a red dot, and by exceedingly complicated and elliptical entries in red and black ink, with red indications of acreage at the end of the individual lines that are taken up in totals given at the end of each paragraph or section. It is evident that it is this smaller class of entry that is the real purpose of Text B.

It is tempting to dwell on many of the interesting points raised by Gardiner in his commentary. I have resisted that temptation from a feeling that this review would serve a more useful purpose if it contained a discussion of some points and features of the papyrus that have not been fully discussed or explained, and in the hope of providing some clarification of a few details, and even at times of suggesting views and explanations rather different from those of the editor himself.

Three features in particular will probably strike every reader of the Wilbour Papyrus: (a) the very late date in the year of the survey and assessments; (b) the relatively small area of the lands listed; (c) the strange

and complicated figures given in Text B and the whole question of its relationship to Text A and its real purpose.

Gardiner has already drawn attention (*Commentary*, p. 10) to the difficulty raised by the date of the survey. The survey of Section II of Text A began on approximately July 23, and it may be assumed that the entire survey occupied roughly the period July 17–August 8. I find it quite impossible to accept that this survey can possibly refer to the normal winter (*shitwi*) cultivation, for the harvest is reaped at the latest in May and modern practice is that threshing follows immediately,¹ and, as Gardiner points out, the survey in ancient times appears to have taken place while the crops were still standing. It is even more unlikely that the threshed grain was allowed to lie on the threshing floors for weeks, or even months, before the assessments for taxation were made, for such procedure would inevitably have entailed heavy losses, and the whole tenor of the entries in the papyrus is surely not that of an assessment for taxation based on actual yield, but on an estimated average yield per acre which is uniform for all lands of the same quality. One is forced to assume, therefore, that the surveys of the Wilbour Papyrus could not have been concerned with areas under winter cultivation but must have dealt only with areas under summer crops, which would normally be reaped in August.² Such crops are grown in places capable of being irrigated artificially during the summer; under the general conditions which probably prevailed in Ancient Egypt it seems that most of these lands must have been berm-lands (the higher land along the river bank), the lands on the sloping Nile banks, and, perhaps, though certainly much less in area, certain land along canal banks, i.e. the papyrus appears to have been primarily concerned with what today would be called *sharaki*-land.

If this deduction be granted, it would explain many things, such as, for instance, the occurrence of plots 'found dry' (A 5x+7; 34, 9; 34, 19), or the plot 'found dry in the first month of Winter' (B 12, 8). A further consequence would be that it should be possible ultimately to localize the places mentioned in the papyrus much more closely, all being relatively near to the Nile, or, though rather less likely, to a canal.

That the Egyptians should have raised summer crops is not inherently improbable, but hitherto our Egyptological literature has very largely ignored the possibility. Schnebel, in fact, seems to assume that summer cultivation did not exist in Pharaonic Egypt and suggests that it was introduced in the reign of Ptolemy II.³ There is, however, some Egyptian evidence. The earliest reference known to me occurs in the Hekanakht papyri where, so it seems, concern is felt lest the inundation should reach the fields before the crops can be reaped.⁴ Another instance is to be found in the tomb of Rekhmirê, where the vizier is said to be 'he who despatches mayors and heads of divisions for summer tillage'.⁵ But the most striking parallel with the Wilbour Papyrus, both in date and actual conditions, is to be found in Pap. Sallier IV, vs. 10, 2–13b, 7:⁶ these jottings refer to work done on 'the great threshing-floor of the high land' between the 26th day of the second month of Inundation and the 12th day of the fourth month of Inundation in the third year of the reign of Menepthah. According to my calculations, these operations extended approximately from July 18 to September 3. It seems quite impossible to maintain that these operations could have been concerned with anything but summer crops.

If we now consider the areas involved in the assessments of the Wilbour Papyrus, the figures are equally striking and significant. It is naturally difficult to give exact figures of the acreage and my estimates are admittedly only approximations. In Text A we have some 17,324 arouras = 11,260 feddan = 11,711 acres. In Text B, for a variety of reasons, it is even more difficult to estimate the acreage, but the total area appears

¹ Schnebel, *Landwirtschaft*, 166, quotes at least one Graeco-Roman instance of threshing starting the day after reaping had been completed.

² Mr. J. T. Davies, who has a special knowledge of Egyptian irrigation and similar matters, reached a similar conclusion for much the same reasons and communicated it to Sir Alan in 1949. My own conclusion was reached quite independently of Mr. Davies, but it is right to state that I am conscious that my approach to the Wilbour and its problems has been much influenced by my own conversations with Mr. Davies during the war.

³ Schnebel. op. cit. 157.

⁴ Winlock, *Excavations at Deir el Bahri: 1911–1931*, 61: cf. line 1 of the letter published there on pl. 33, *ir twht nbt m šht-n ntk škr s(y)* 'as for anything that is flooded in our land, it is you who are cultivating it'.

⁵ *Urk.* IV, 1113, 5 = Davies, *The Tomb of Rekh-mi-re at Thebes*, II, Pl. 27, 25; cf. pl. 121.

⁶ Gardiner, *Late Egyptian Miscellanies*, 94–97; a translation of the more important passages, by Gardiner himself, will be found in *JEA* 27, 62–64.

to have been not less than about 14,420 arouras = 9,373 feddan = 9,748 acres. I must add, however, that for reasons that will become apparent shortly, there is a possibility that the figures in Text B may in reality represent only about half the true acreage of the areas listed. There are, of course, no means today of estimating the true extent of cultivable land in Pharaonic Egypt, but it must have been considerably less than the modern acreage. Modern statistics of acreage and crop yields, and in particular all statistics relative to years subsequent to the latest raising of the Aswān Dam, are useless for our purpose since conditions are now so vastly different. Since one must have some sort of a yard-stick, I have deliberately referred to Willcocks, *Egyptian Irrigation* (London, 1889), since his statistics are the oldest available to me, though admittedly even they must be in excess of the Pharaonic figures.

Since Texts A and B deal with lands lying approximately between Medinet el-Fayyūm and a place a little to the north of Minia, I assume for the sake of argument that this is roughly equivalent to the northern half of the modern Minia Province and all Beni Suef Province. I have been compelled to omit all reference to the Fayyūm owing to the absence of any suitable or reliable statistics, but the cultivable lands in the part of the Fayyūm that interests us must have been relatively small.¹ According to Willcocks's figures,² half Minia Province would be 210,651 feddan, and Beni Suef Province 242,678 feddan, a total of 453,329 feddan. This total is so immensely in excess of the figures in either Text A or Text B that it is immediately evident that the areas given in the papyrus cannot represent the total cultivated area.

It seems certain, therefore, that the survey and statistics in the papyrus deal only with a particular type of land, of distinctly limited area. In the light of what has been said above in connexion with the date of the survey, it may be suggested that in Text A the survey was concerned only with lands under summer cultivation, the only lands that in July were in a state to be surveyed and assessed for taxation. In Text B the situation is somewhat different. As pointed out above, while all the land in Text B is *Khato*-land, it appears that the real interest of the scribe lay only in those lands marked by the red dots. I suggest, therefore, that Text B contains or purported to contain, a complete register of all *Khato*-lands in the area under consideration, but that the holdings specially marked and treated are those *Khato*-lands under summer cultivation. In support of this theory it is interesting to note that the approximate area of the lands in Text B which I suspect bore summer crops is some 2,443 arouras, or 17 per cent. of the apparent total; if, as I suspect, the apparent area of 14,420 arouras is only about half the true area, the percentage is about 8½ per cent. It is a strange coincidence that according to Willcocks the berm-lands in Beni Suef Province and half Minia Province amounted to some 36,500 feddan, or approximately 8 per cent. of the total area. Figures and percentages are notoriously deceptive and uncertain, and I have no wish to stress the apparent correspondence between these two percentages, but they certainly merit consideration.

If we now turn to the statistics in Text B some interesting facts are revealed. As I have already remarked, the entries fall superficially into two classes, one being normally marked with a red dot, and the other, by far the more numerous class, having no dot. The latter class contains a brief description of the plot and a number of arouras, the whole entry being in black. The first category always contains a description of the plot and an area in black, followed by complicated entries written entirely in red or in red and black; these red or red and black entries always consist of the word 'balance' in red, followed by an indication of area in red or black, there sometimes being several such entries. It is only the last entry in each line, and only the entry that is entirely in red, that is included in the total at the end of the paragraph; this total often expresses the area, whatever the type of land listed, reduced to terms of 'fresh land' (*njb*). It is these entries that are so puzzling, for there may be as many as four of them, and it is quite clear that the successive figures bear no mathematical relation either to each other or to any total that may be given, and that the word 'balance' cannot bear precisely the meaning we usually associate with it.

The solution of this puzzle is, I think, to be obtained from a study of those entries that correspond with

¹ The minimum and maximum levels of the Fayyūm lake in the late Twelfth Dynasty varied between 16.5 and 19 metres above the present sea level; in Ramesside times, allowing for the deposition of silt, the lake level must have been slightly higher (cf. Ball, *Contributions to the Geography of Egypt* (Cairo, 1939), 199-210). The effects of this on the extent of the cultivable area between the Middle Kingdom and Ptolemaic times can be seen by studying any good contour map of the Fayyūm, e.g. Ball, *op. cit.*, pl. 9.

² Willcocks, *op. cit.*, table XVIII on p. 71. Note that Willcocks's figures are in 'acres'; it is evident from his page 3 that these are 'Egyptian acres' and correspond to feddan.

those of Text A. There are surprisingly few of these, a fact for which I can offer no explanation at present, but the most significant for our purpose is the entry for a place south of Sapa, A 74, 36-37 (*Pōsh* A) = A 64, 37 (*Pōsh* B) = B 23, 32. To appreciate the importance of these entries it is essential to set out the main facts in abbreviated form, using the conventions employed in the Translation:

A 74, 36-37: land cultivated by him apportioned . . . 10, mc. 5, mc. 50, sacks $3\frac{1}{2}$.

A 64, 37: in apportionment of land cultivated . . . 10. $2\frac{1}{2}$ AR. mc. $1\frac{1}{2}$.

B 23, 32: . . . arable land, arouras 20, BALANCE, ARABLE LAND, 5, MAKING $2\frac{1}{2}$ AR.

Gardiner has demonstrated in his commentary that *Pōsh* A entries record the area of the plot (in this case 10 arouras), the tax per aroura (5 mc.), the total tax (50 mc.) and the sum apportioned ($3\frac{1}{2}$ sacks), most probably $7\frac{1}{2}$ per cent. of the total. In *Pōsh* B the first black figure is identical with the first red figure in *Pōsh* A and expresses the area, the first red figure (with certain exceptions discussed below) is always apparently one-quarter of this area, and the multiplication of the two red figures gives the total amount apportioned. It is at once evident in the example quoted above that the first red figure in *Pōsh* B is identical with the last red figure in B 23, 32, and we already know that this figure represents 5 arouras of arable land expressed in terms of fresh land, i.e. *the first red figure in Pōsh B is always expressed in terms of fresh land*. That this is correct is shown by a study of those entries in Text B which do not give the reduced fresh land acreage, e.g. A 43, 10-11 = A 38, 10 = B 10, 16; A 74, 2-3 = A 58, 13 = B 17, 30; all these give a final red acreage of arable land in Text B that is double that of the first red figure in the corresponding *Pōsh* B. On the other hand, A 39, 14 (*Pōsh* B) = B 22, 12, but A 43, 27-28 (*Pōsh* A) cannot as it stands refer to the same plot (at least, not in the same year) because the area (30 arouras) is too great.

If this important fact is borne in mind, it is possible to offer some explanation of a number of apparent anomalies to which Gardiner has already drawn attention (*Commentary*, 101-4). In all the entries discussed by Gardiner the holdings either consist entirely of fresh or tired land, or contain a combination of two or more types of land. Where the holding is entirely of fresh land the first red figure in *Pōsh* B is always one-quarter of the area of the plot, but multiplication of the two red figures in *Pōsh* B does not give the apportionment of *Pōsh* A. In tired land or in holdings containing more than one variety of land the multiplication does not give the amount apportioned, nor is the first red figure in *Pōsh* B one-quarter of the first red figure in *Pōsh* A. Gardiner's explanation of this is based upon the unique A 76, 3-5 where in *Pōsh* B we find a second red figure of 'mc. 3'. Gardiner accordingly suggested that, after allowing for the frequent mathematical errors which these 'anomalous' cases led the scribe to make, the required result is obtained if one multiplies, in *Pōsh* B, the first red figure by 3. It is quite true that the result can be obtained in this way—but only because 3 is double $1\frac{1}{2}$ —but I doubt whether this is the happiest way of formulating the solution or whether it contains the whole truth. It is suspect because it leaves without explanation the apparent abandonment of the general principle that the first red figure in *Pōsh* B represents one-quarter of the first red figure in *Pōsh* A, and because it demands an abrupt doubling of the apparent rate of tax for no obvious reason.

If, however, these anomalies are examined in the light of the fact that the first red figure in *Pōsh* B must represent one-quarter of the plot when expressed in terms of fresh land, the position is entirely different, and it immediately becomes apparent that the anomalies no longer exist. Where fresh land alone is concerned the first red figure in *Pōsh* B is automatically one-quarter of the area (A 34, 38-40 = A 28, 10-12; so also, with restoration, A 34, 21-24 = A 24, 30). Where tired land only is concerned as in A 83, 26-29 = A 86, 3-5 we find a plot of 14 arouras of tired land but only $2\frac{1}{2}$ arouras as the first red figure in *Pōsh* B. But 14 arouras of tired land are equal to $10\frac{1}{2}$ arouras of fresh, a quarter of which is $2\frac{1}{4}$, which is the same figure as given in *Pōsh* B after allowing for the tendency of the scribe to omit the smaller fractions. Precisely the same conditions may be observed in those cases where the plot is 'mixed': e.g. A 29, 4-7 = A 24, 13-16, where we have a holding of 40 arouras composed of 20 arouras arable land and 20 arouras tired land, but only $6\frac{1}{4}$ as the first red figure in *Pōsh* B. If these areas are converted into fresh land, 20 arouras arable = 10 arouras fresh, 20 arouras tired = 15 arouras fresh, and the whole mixed holding is equivalent to 25 arouras of fresh land, a quarter of which is $6\frac{1}{4}$. After allowing for scribal errors, all the other anomalous cases yield similar results.

The explanation of the fact that in these anomalous cases multiplication of the red figures in *Pōsh* B does not give the apportionment of *Pōsh* A is thus a purely mathematical one; it is because the lands are of

different values but reduced to a purely formal proportion that the result differs. It is evident that the real rate of tax on these lands of varying quality is rather different from the apparently invariable figure of mc. $1\frac{2}{3}$. In a plot of 10 arouras arable land, the proportion of the land susceptible to apportionment is expressed in terms of fresh land, i.e. $2\frac{1}{2}$ arouras, but since the plot in reality contains no fresh land it is obvious that the real taxable area is 5 arouras, each of which pays $\frac{2}{3}$ mc. tax. Thus in the apportioning texts the true rate of tax is $\frac{2}{3}$ mc. per aroura arable, $2\frac{1}{3}$ mc. per aroura tired, and 3 mc. per aroura fresh land. In holdings of arable land it will be noted that the first red figure in *Pōsh* B actually represents half the area expressed in terms of fresh land, the fact that that figure is one-quarter of the first red figure in *Pōsh* A simply being due to the fact that fresh land is double the value of arable. Bearing this fact in mind, if T = the sum apportioned, and a = one-quarter the area of the plot expressed in terms of fresh land, a simple formula will cover all cases, i.e. $T = 2(a \times 1\frac{2}{3})$. In practice this formula was only strictly applied for holdings of fresh and tired land or for mixed holdings, in arable land the apparent procedure is expressed as though half the real area expressed as fresh land were multiplied by $1\frac{1}{2}$, basically the same process.

It may be objected that this is not stated in the text. It may be suggested that this was merely because the procedure was so familiar to the scribe that it was assumed that everyone was aware of it. Much the same assumption in land measurement is shown in the great Edfu Donation Text where a typical entry reads 'north thereof, $6\frac{1}{2}$ by $4\frac{1}{2}$, 5 by 5, making $28\frac{1}{2}$ ', no indication being given here, though it is elsewhere, that the measurements are in *ht n mch* and the area in arouras, still less is there any indication in the entire text, though the procedure is the same in every instance, that the formula of calculation is

$$\text{area} = \frac{1}{2}(a+b) \times \frac{1}{2}(c+d),$$

as pointed out by Lepsius and Brugsch.²

Thus I suggest that the dotted entries in Text B refer to *Khato*-lands under summer cultivation, and that the final red figures indicate the areas of such lands from which the apportionments of *Pōsh* A and *Pōsh* B are taken. What, then, is the meaning of the other figures in Text B? It is certain, I think, that they bear no obvious mathematical relation to each other, they neither add up nor 'balance' satisfactorily, and no system can be deduced. The only suggestion I can make is that these are records of the areas for apportionment for a number of years—as far as I can see the figures cover about four successive years—and that 'balance' in these entries means 'that proportion of a plot of *Khato*-land from which, in a given year, the apportionment is taken'. This suggestion is the only one that occurs to me that can provide an explanation of the great variation in the figures from year to year. This variation in acreage is precisely the condition that is found in the *hōd el-gezīrah*, or 'island division' in modern Egypt. Many years ago in this *Journal* Sir Henry Lyons³ pointed out that the *hōd el-gezīrah* is land on the Nile bank from flood level down to the water's edge at the lowest stage of the river, that it is cultivated in spring and summer, that it varies in area from year to year, and that it has to be re-measured each year when the river is low. The conditions described by Sir Henry Lyons in my view accord exactly with the ancient conditions that I suggest lay behind the Wilbour Papyrus. Moreover, it should be pointed out that in Text B not only do the areas vary in extent, as one would expect with *hōd el-gezīrah*, but the lands themselves are sometimes recorded as varying in quality (e.g. B 10, 9. 15. 19; 12, 6; 15, 22; I have counted some eighteen instances), a condition that is most prone to occur in these 'island divisions'.

It remains to consider the first black figure in the Text B entries: does it indicate the theoretical full extent of the plot, or is it, like the other figures on the line, only an indication of the taxable area in one particular year? It will be noted that in B 23, 32 the first black figure is 20 arouras, a figure which seems to accord with A 64, 32-34 and its mention of a plot of 20 (arouras), and one might argue that of this plot of 20 arouras, 10 arouras (A 74, 35-37 = 64, 36-37) was *Khato*-land susceptible to an apportionment of $3\frac{2}{3}$ sacks. There are numerous entries in Text B in which, superficially at least, there seems to be no objection to making a similar deduction, e.g. B 13, 26. 29. But closer examination will reveal a number of entries in which the first black figure cannot indicate the theoretical full extent of the holding because it is smaller than the final red figure, which we now know only indicates that proportion of the plot that bore the apportionment, a proportion that can never be more than 50 per cent. of the whole and which in a few cases is only 25 per cent. This is quite clear in such entries as B 9, 19; 10, 5; 13, 19. In B 7, 6; 8, 3; 9, 18; 9, 25, etc. the final red figure is either equal to or slightly less than the first black figure, but since in every example

² Chassinat, *Edfou*, VII, 222, 8-9.

² Cf. Brugsch, *Thes.* 533.

³ *JEA* 12, 242-3.

the final red figure must be doubled to obtain the full extent of the plot, it is certain that in these entries also the first black figure cannot give the full acreage. I conclude, therefore, that none of the dotted entries in Text B, nor those entries that inadvertently are not dotted but are included in the totals, record more than a maximum of 50 per cent. of the actual acreage of the holdings listed. It is for this reason that I have suggested above that it is possible that the true acreage of the lands in Text B may be about double what it appears to be.

Whether the figures in the undotted entries represent full acreages, or only proportions of them, cannot be decided on the evidence available. While I should not be surprised to find that such entries had static acreages, there are a few instances where the acreage does in fact appear to vary. This is a problem that cannot be solved at present, but I am satisfied that in order to obtain the true extent of at least the dotted entries, all the entries in them must be doubled, and in a few cases perhaps even be quadrupled.

It is remarkable how many of the figures for the final and intermediate years are less than those of the initial black figures. If such declines in the area of cultivated land proved to be general in these years of the reign of Ramesses V, they must surely have been reflected in reduced harvests. Were they due to a series of low Niles? Have we here yet another sidelight on economic conditions in Ramesside times?

Many other points in this fascinating papyrus and its illuminating and stimulating commentary invite discussion. The kinds of land mentioned, their position, and the fluctuations in their quality reveal intriguing facts when tabulated and analysed, but it is impossible to discuss them here. But it is necessary to point out that, if I am correct in suggesting that the primary concern of the papyrus is with summer cultivation, we must be prepared to reconsider our ideas of Ancient Egyptian irrigation. It is inconceivable, for instance, that Ḥekanakhte could have undertaken summer cultivation without the use of at least the *shādūf*. In fact, it is difficult to see how the *shādūf* alone could have served the purposes of summer irrigation, for it is slow and expensive for such work,¹ and in modern Egypt, so I am informed, the cost of working *shādūfs* for summer irrigation has always exceeded the total value of the summer cereal crops.

If these comments and suggestions which a very careful study of the Wilbour Papyrus have provoked are accepted, they will certainly throw new light on the papyrus itself and on economic life in Pharaonic Egypt. But nothing can detract from the abiding value of Gardiner's magnificent edition. From all points of view it is one of the greatest and most weighty of all Sir Alan's many contributions to Egyptology, it adds to our knowledge in many directions, and opens the door on new and fascinating vistas of future inquiry and research. If one day we may be able to produce a proper economic history of Ancient Egypt, that will be due to a very large extent to Sir Alan's monumental work and his preparatory studies.

H. W. FAIRMAN

Studia Aegyptiaca II. Die erste Zwischenzeit Ägyptens. By HANNS STOCK. *Analecta Orientalia*, 31. Pontificum Institutum Biblicum, Rome, 1949. Pp. xviii+110, 14 pls., 4 maps.

In the present volume, the review of which is regrettably belated, the author makes the most serious attack on the historical problems of the First Intermediate Period that has been attempted for a very long time, and it must be said at once that he has given us much food for thought and discussion. In his view the story opens in the reign of Phiops I, when that ruler divorced his first queen and disinherited his son by her. The king then married two daughters of the Abydene noble Khui and had a son by each of them, namely, the future kings Merenrēt and Phiops II. The descendants of this Khui, who for a while united in their own hands the Thinite and Serpent-Mountain nomes and were buried at Dēr el-Gebrāwī, provided the viziers and other high officials of the Memphite Court. In the latter part of the reign of Phiops II the vizierate was divided. The Vizier of Upper Egypt was essentially a feudal baron, and was usually a scion of the Abydene house of Khui, while the Vizier of Lower Egypt was a Court official, a direct servant of the king.




This division of the vizierate was but a beginning of a process which ere long led to the virtual independence of the barons of Upper Egypt from the control of the Crown, to which they paid but nominal allegiance; in the north, where feudalism seems not to have been so strong, the royal writ for a while ran less

¹ Cf. Willcocks, *op. cit.* 244-5 and table XXXVII.

limpingly. Here the weakness of the kings was in due course shown by unchecked raids and infiltration into the Delta on the part of Semitic tribesmen who settled on the rich land but, as Stock sees, did not set up a Semitic dynasty as some have supposed. Ultimately the impotence of the kings, coupled with Asiatic incursions, led to the utter subversion of law and order of which we read in the 'pessimistic' literature. The author maintains that the disturbances were confined to the northern half of the land, the nomes of Upper Egypt remaining reasonably prosperous under the control of the local ruling families. There is probably some truth in this view, but it can hardly be entirely correct; it is not to be supposed that even the weak Pharaohs of Dyns. VII and VIII made no attempt at all to maintain some semblance of authority over their turbulent subjects in the South, and in fact there are to be found distinct suggestions of civil war.

After the fall of the Memphite successors of Dyn. VI, it has been supposed by some scholars, headed by Sethe, that there came into being a kingdom of limited extent with its capital at Koptos, but the error of this hypothesis was noted by Hayes (*JEA* 32, 21 ff.). Stock agrees with Hayes in this respect, but for the rejected Koptite dynasty he substitutes an Abydene. To the present reviewer, Stock's theory carries no more conviction than Sethe's; the arguments against it have been set out in detail by Posener (*Bibliotheca Orientalis*, 8, 169 f.), and Hayes and he are surely right in accepting the traditional view, that the Heracleopolitan régime directly succeeded the Memphite without any intervening or contemporary sub-dynasties.

As regards the circumstances of the rise and fall of Heracleopolis and the growth of the power of Thebes, Stock's views and my own are entirely divergent. Whereas he maintains that the Heracleopolitans never controlled the nomes south of the Thinite, to me it seems clear that the early Heracleopolitan kings extended their dominion, albeit temporarily, to the First Cataract, see Winlock, *Middle Kingdom*, 5 f., and my remarks thereon *JEA* 34, 123. Our fundamental divergences on this matter arise in part from differing interpretations of the same evidence, but in part, as it seems to me, from a tendency on Stock's part to make the evidence suit his theory; he repeats the old argument that the Heracleopolitan cartouche on the Aswān rocks was due simply to a quarrying expedition—on the wrong side of an existing Theban state—without admitting the possibility of an alternative explanation, and dismisses in a footnote (p. 31, n. 1), without argument, my interpretation of the He-nub graffiti; on the latter point see Posener's comment *Bibl. Or.* 8, 170-1.

There is no space here to go into the problems of the succession of the kings of Dyn. XI, but Stock seems justified in his conclusion that   and  are one and the same king. The summing up of the argument and the discussion of the chronology will be accepted or not according as the reader accepts or rejects the author's theses, but his attempt on p. 103 (n. 1) to reduce the length of the reign of Phiope II by thirty years, rejecting the joint evidence of the Turin Papyrus and Manetho in favour of his own preconceptions, does not inspire confidence in his arguments; in any case there are far too many unknown quantities for any estimate of the length of the First Intermediate Period to be more than plausible guesswork.

If we have had regretfully to reject the author's views on the history of his period, nevertheless we owe him a great deal, not only for the collecting of such a mass of evidence bearing on it, but also for providing a basis for further discussion and argument, whereby in due course some approximation to the real state of affairs may haply be attained.

R. O. FAULKNER

The Ashmolean Ostrakon of Sinuhe. By JOHN W. B. BARNES. Published on behalf of the Griffith Institute, Ashmolean Museum, Oxford, by Geoffrey Cumberlege, Oxford University Press, London, 1952. Pp. v+41, 11 plates, £1. 10s.

The Story of Sinuhe was in ancient times perhaps the most popular story ever written by an Ancient Egyptian, and in modern times it has come to be regarded as the classic *par excellence* of Egyptian literature. The discovery and re-uniting of the divided and far-separated portions of an enormous Ramesside ostrakon bearing a new text of the famous tale must therefore be a matter of importance to those who are interested in the textual criticism of the ancient stories, and it is with a feeling of gratitude to all concerned that we view the present publication.

The story of the recovery of the complete ostrakon has been briefly told by Dr. Barnes in his Preface to this book, in which he has studied it in detail. It contains 130 lines of text in a neat Ramesside book-hand, punctuated with red verse-points, and includes the greater part of the story, from the opening words down

to B 280. The text as it stands here is very corrupt, but even in that state it occasionally yields a clue to the archetypal reading, and the real value of the author's work, apart from his admirable publication of the text itself, is that he takes the student step by step through the new version, analysing each new reading in turn, however bad it may be, and evaluating it in comparison with the other extant versions. Not only has the author really advanced our comprehension of the most outstanding of all Egyptian tales, but he has also brought home to scholars the fact that the most corrupt Ramesside version of an old text may yield a clue to an obscure reading. Incidentally, he has also made it clear that the old idea of 'recensions' of the text of *Sinuhe* must be abandoned; in his own words: 'Ashm and its nearest relatives . . . are not degenerate descendants of a manuscript closely resembling B, R or . . . PBA, but of a very different text, of independent authority'. It is but seldom that the reviewer differs from the author's judgements on points of detail.

A valuable feature of this book is the way in which the text of the ostrakon is presented. Following on a Frontispiece displaying the complete ostrakon as now restored, a Foreword by Dr. Harden and a Preface by Dr. Barns, there comes a series of eleven plates, each of which displays in the upper half a collotype reproduction of a section of the hieratic text, thirteen lines to a plate, while below it is the autographed transcription into hieroglyphic, thus enabling readings to be checked with the maximum of ease. After the plates comes the autographed Commentary already referred to, while after that again follow two printed pages of Conclusions and a most useful Index of the text of the ostrakon. Apart from our debt to the author, we must express our gratitude to the authorities of the Griffith Institute for sponsoring this publication, and to the University of Oxford for providing a financial subvention which has enabled it to be placed on sale at a price which is within the reach of any interested student.

R. O. FAULKNER

Egyptian Art in the Brooklyn Museum Collection. Pp. 5, 51 photographic figures. Brooklyn, 1952.

This little album of fifty-one photographs, with an Introduction initialled by J. D. C(ooney), brings before the public the pick of the Egyptian antiquities of artistic importance which are preserved in the Brooklyn Museum. The objects depicted cover a range of time from the prehistoric period to the Nineteenth Dynasty, and, within the limits of the book, give a very fair cross-section of Egyptian art; they include sculpture in the round and in relief, stone and pottery bowls and vases, and *Kleinkunst*; wall-paintings alone are not represented. The objects displayed are shown in roughly chronological order, and are followed by just over two pages of useful bibliographical notes on each photograph in turn; among the items which most interested the reviewer, there may be mentioned No. 21, alabaster seated statue of Phiope I in festival costume; No. 31, an ebony statuette of Amenophis III as a young man in which the face already seems to suggest a certain weakness of character; and No. 49, a really striking portrait-head serving as lid of a Canopic jar of an official of Ramesses II. We hope that this book will serve not only to enhance public interest in the collections of the Brooklyn Museum, but also to attract more attention to Ancient Egypt in general.

R. O. FAULKNER

The Hittites. By O. R. GURNEY. Pelican Books No. A259, London, 1952. Pp. xiii+240, 32 plates, 19 text-figures. 3s. 6d.

Once again the publishers of Penguin Books have added another to the series of popular yet authoritative works on archaeology for which they have been responsible, and which serve the vital purpose of making the results of research available to that wider public whose interest and support are essential to the future existence of archaeological studies. In the present volume Dr. Gurney maintains the standard of his precursors, covering the whole gamut of Hittite history and culture in 240 pages full of information and well illustrated with plates and drawings.

To the Egyptologist the main interest of this work lies in the account of the relations between the Hittite Empire and Egypt, and in this portion there are a few statements which are open to question. For instance, on pp. 26-27 it is stated that after Tuthmosis III crossed the Euphrates, 'for some thirty years the Egyptians were supreme in Syria. But the Egyptian hold on northern Syria did not long survive the death of the energetic Tuthmosis, and shortly after the accession of Amenophis II the Egyptians were forced to retire in their turn before another Hurrian power, Mitanni.' This is surprising in view of the facts that (1) Tuthmosis III in his Euphrates campaign actually invaded Mitannian territory (cf.

Gardiner, *Onomastica*, 1, 173* ff.); (2) the major factor in Near Eastern international politics down to the collapse in the latter years of Amenophis III was the Egyptian supremacy in Syria, and when the troubles began it was to Egypt that the petty states of northern Syria looked for protection; and (3) under the three successors of Tuthmosis III relations with Mitanni steadily increased in cordiality, beginning with an embassy to Egypt under Amenophis II and culminating in two marriages of Mitannian princesses to the reigning Pharaohs. In the section on warfare, also, the paragraph on p. 110 devoted to the famous battle of Kadesh hardly does justice to the military situation. Admittedly Ramesses II was saved from practically certain disaster by the very opportune arrival of reinforcements from Zimyra, but no explanation has yet been forthcoming as to why, when the tide of battle turned and the Hittite chariots were driven back on the Orontes, the Hittite commander kept 8,000 infantry inactive on the east bank of the river. In fact, technically victory belonged to the Egyptians, in that they were left in possession of the stricken field; but of course in the true military and political sense the Hittites won the day, in that Ramesses was in no case to continue the campaign. But a fact that Dr. Gurney does not mention is that at a later date Ramesses must have redeemed his failure, for in his Year 8 we find him capturing Dapur in the territory of Tunip, in what was admittedly Hittite territory, and we also read of the existence of a statue of the king in Tunip, which surely indicates subjection, albeit temporary, to Egypt. Later, of course, the Egyptians must have withdrawn from this region, for it is highly improbable that, at the time of the famous treaty, the frontier between the two powers lay far north of the Nahr el-Kelb; this seems to have marked the point beyond which neither power was able permanently to maintain itself.

So far as the main topics of his book are concerned, however, the author has succeeded admirably in his purpose of providing the non-specialist reader, as well as archaeologists working in other fields of the Near East, with a conspectus of an ancient culture which has emerged into the light of day only within the last seventy or eighty years, and for this we owe him our grateful thanks.

R. O. FAULKNER

The Exact Sciences in Antiquity. By O. NEUGEBAUER. Published by Geoffrey Cumberlege, Oxford University Press, London, 1951. pp. xvi+191. Pl. 14. £2. 2s. 6d.

In this book, amplifying six lectures delivered at Cornell University in 1949, Professor Neugebauer gives a valuable survey of the historical interrelationship between mathematics and astronomy in ancient civilizations. The main emphasis is on mathematics and astronomy in Babylonia and Egypt (of which excellent summaries are given) in their relationship to the science of the Hellenistic period—the period following the Alexandrian conquests of the ancient sites of oriental civilizations. During this period a form of science developed which later spread over an area reaching from India to Western Europe and was dominant until the creation of modern science in the time of Newton. In the development of this science astronomy played a very important part.

Most valuable for the student are the chapters on 'The Sources and their Evaluation' and 'The Origin and Transmission of Hellenistic Science'. We are shown the oriental background of the mathematics and science of the Greeks and the influence of Babylonia and links with India are emphasized. Two widely separated types of Greek mathematics must be distinguished—one, represented by the strictly logical approach of Euclid, Archimedes, and others: the second type is part of general Hellenistic mathematics, the roots of which lie in the Babylonian and Egyptian procedures.

There are two clearly marked periods in Babylonia—the 'Old Babylonian' (c. 1800 to 1600 B.C.) during which mathematics reached the highest level ever attained in Babylonia, and the 'Seleucid' datable to the last three centuries B.C., when the only essential progress made was the introduction of a sign for zero. Early Babylonian astronomy was crude and merely qualitative—on a par with contemporary Egyptian astronomy—but texts from the 'Seleucid' period are based on a consistent mathematical theory of lunar and planetary motion.

A direct survival of Babylonian method is seen in a problem of mathematical geography expressing the latitude of a locality by means of the ratio of the longest to the shortest daylight for the region in question. In the theory of lunar motion a Greek papyrus of purely mathematical character is based on a Babylonian method but adjusted to the Egyptian calendar.

The author points out that the relatively primitive level of mathematical knowledge in ancient Egypt makes it possible to investigate a state of development which is no longer available in so simple a form except in

Egyptian documents. The whole procedure was essentially 'additive', based on simple counting. Multiplication was performed by breaking up one factor into a series of duplications—the same principle is employed in modern computing machines. Some original and interesting comments on the methods of handling the 'unit-fractions' are given. Such fractions influenced the Roman administrative offices and thence spread through the Roman empire. In Ptolemy's *Almagest* final results are often expressed in these fractions. They are occasionally used to this day in stock exchange quotations in Cairo, e.g., $\frac{1}{2} \frac{1}{32}$ for $\frac{17}{32}$.

The 365-day Egyptian calendar—the only intelligible calendar which ever existed in human history—became the standard astronomical system of reference. It was kept alive throughout the Middle Ages and used in the time of Copernicus. Another Egyptian contribution to astronomy is the 12-division of daytime and night which we still use. An astronomical concept of real Egyptian origin is that of the 'decans' and it is suggested that the decans did not form a closed ring on the heavens, but that a decan may represent any constellation rising heliacally during an interval of ten days (cf. the *paranatellonta* of the Greeks). On this assumption, however, it is not easy to explain the diagrams of the Cenotaph of Sethos I; but it should be noted that the author in a private communication to the writer claims to have successfully resolved the difficulty. The diagrams in the tomb of Senenmut show two stages of design. Faint traces in blue of an earlier arrangement are visible and indicate that artistic principles largely governed the arrangement of the scenes. Thus it seems a hopeless task to attempt to identify the star groups depicted with the modern system of constellations.

A major incentive for the study of astronomy was the attempt to achieve some regularity in the intercalations of the lunar calendar. Astronomy did not originate in astrology as has so often been stated, but the widespread belief in astrology, as the one science which gave insight into the causes of events on earth, influenced the transmission of astronomical knowledge from one nation to another. Astrological documents in Mesopotamia belong to the Seleucid period and their number is insignificant compared with that of the astronomical texts. In Egypt the earliest horoscopes, Demotic and Greek, are from the time of Augustus.

The author illustrates the difficulties which beset the investigator in the field to which he has devoted himself for many years with remarkable success. Many editions of the classical authorities are untrustworthy or incomplete and an enormous amount of material in the form of cuneiform tablets is still unpublished and even unexamined. There is no reliable edition of Ptolemy's *Geography*—one of the most influential books of antiquity—and as yet we know practically nothing of the history of the zodiacal and planetary symbols. A timely warning is given to those attracted by pan-Babylonian theories which still exercise a baneful influence in the literature.

Professor Neugebauer pays a deservedly high tribute to Sir Harold Bell's *'Egypt from Alexander the Great to the Arab Conquest'* (Oxford, 1948) not only as a summary of the history and methods of papyrology, but as a brilliant study of the diffusion and decay of Hellenism, the general problem, of which one facet is the subject of this book.

It is satisfactory to learn that complete editions of all available cuneiform and Egyptian astronomical texts are in course of preparation and will shortly be available for students. R. W. SLOLEY

Ancient Egypt as represented in the Museum of Fine Arts. By W. S. SMITH. Third edition, fully revised, Boston, 1952. Pp. 187, 117 figures.

The appearance of a third edition of Dr. Smith's handbook testifies both to its excellence and to its success. It is not so much an introductory guide to the Egyptian collection of the Boston Museum of Fine Arts, as a conspectus of Egyptian history and material culture illustrated by objects from that collection. The system adopted by Dr. Smith is to give an historical survey of a period, following it with a description of objects belonging to that period in the Boston Museum. The text is illustrated with excellent photographs, very carefully chosen, of many of the finest pieces in that collection. In this new edition the author has not been content to reproduce the illustrations of his earlier editions but has in some cases replaced them with photographs of different pieces; in other cases he has given new photographs of the same pieces—always improvements, even though the original photographs were adequate.

Few alterations have been made to the main body of the text. The wording of some passages has been more carefully chosen; a few additional remarks have been interpolated, taking notice of the recent discoveries

at Helwān and Dahshūr. At the end of the book Dr. Smith has now prefaced his chronological list with a brief account of the way in which Egyptian chronology has been established. This account is carefully written—as is very necessary—and is an admirable introduction to the subject. It may be doubted whether a subject so full of difficulties belongs to a popular work of this kind. It is also doubtful whether Dr. Smith has achieved in his historical summaries a proper balance between detail and the general narrative. In particular, his section on the Old Kingdom—his own special reserve—is overburdened with too many details of personal relationships and problems of succession. Thus, while we are told much about Hetepheres and the dynastic troubles of the Fourth Dynasty, Dr. Smith forgets to mention that the Pyramids of Gīzah were built by the kings of that dynasty, although this fact is assumed throughout his narrative of the period.

In general, however, the book fulfils admirably its purpose of being 'a short history of the development of Egyptian culture and art'. It is refreshing to find an Egyptological book written for the public in which scholarship has not been sacrificed and which is yet sympathetically written and very readable.

T. G. H. JAMES

Early Khartoum. By A. J. ARKELL. Pp. xvi+145; pls. 113. Oxford, 1949. £5 5s.

This volume is in many respects a notable landmark in the archaeology of north-east Africa. It records the results of the first excavations conducted by the Sudan Government Antiquities Service, and is its first full-scale publication. It also marks the first step towards filling the archaeological vacuum, at least as regards prehistory, that has hitherto existed in the Anglo-Egyptian Sudan south of the Second Cataract. It is fortunate that this pioneering effort should have found in Arkell so careful and conscientious an excavator, and one, moreover, who has published speedily and in detail. The Sudan Government are, indeed, to be congratulated on their initiative, and we look forward to many more such excavations and their publication.

The site which was the chief object of the excavations is a small mound on the north-east of Khartoum. It had been used as a cemetery during the siege of Khartoum in 1885 and apparently for some years previously, and it also contained some Meroitic burials as well as the prehistoric remains that provide its main interest. The site has suffered greatly from denudation and has been terribly disturbed, so that not one of the early burials was found intact. In spite of these unfavourable circumstances, the excavations have introduced us to a new culture and have afforded abundant material for study.

The prime interest of the site lies in the remains which it has revealed of a primitive, hunting, negroid community, living in mud and wattle huts. That it was a prehistoric community is certain, for the discovery of a hitherto unknown and extinct type of reed rat, *Thryonomys arkelli* Bate, and the fact that the settlement existed at a time when the Nile was considerably higher than today and when the rainfall was very much heavier, indicate conditions far different from those that can be deduced in the Nile valley in historic times. The flint industry was predominantly a microlithic one, using small, water-worn quartz pebbles. The most typical objects of Early Khartoum, however, are the bone harpoons of early type, the majority apparently having at least four barbs, and the pottery. The typical pottery of the site is a hard ware decorated with wavy lines made by combing the surface with the spine of catfish; Arkell suggests that this inspired the Badarian ripple technique: the resemblance certainly exists but the influence is not proven as yet.

Also found in the settlement were a very few sherds of a hard red ware, usually burnished and decorated with patterns of impressed dots, and associated with gouges typical of Fayyūm B. Arkell's subsequent excavations have proved that this 'Gouge Culture' is later than, and derived from, the 'Wavy Line Culture', and for them he now favours the terms Khartoum Neolithic and Khartoum Mesolithic respectively. Their origin, he suggests, is to be sought perhaps to the south-west across the Sahara. The reviewer regards with considerable unease the introduction of the terms Mesolithic and Neolithic. It is doubtful, to put it mildly, whether the nomenclature of European prehistory can be applied either properly or accurately to Africa, and when one considers how Egyptian prehistory has been bedevilled by the use of the word Neolithic, and still more by the rash and hasty conclusions that the associations of that word have provoked, it is more than unfortunate that Arkell should so hastily have labelled as Mesolithic and Neolithic cultures that still are imperfectly known and of which our information is derived from only two small and disturbed excavated sites and a number of surface sites not yet worked.

The Meroitic graves produced little of note, except for additional support for the view that the stone rings

so often found in Meroitic and X-Group sites were archer's looses. Lastly, it should be noted that this book also includes a description of the contents of two graves found near Omdurman Bridge. These graves may have been proto-dynastic since they produced pottery very closely akin to the rippled A-Group ware found at Faras. It is one of our problems that hitherto no other pottery of this type has been found between Faras and Omdurman, but this only emphasizes the importance of Arkell's work. He has not only introduced us to, and published in exemplary fashion, two new cultures, but he has brought out vividly what a huge field of work, practically untouched, there lies in the Sudan. Let us hope that the Sudan Government will be able to pursue this very important work before it is too late, but may one express the hope that, without any lowering of standards or loss of detail, future publications will be produced at a more moderate cost. If something is not done quickly to reduce the ridiculously high prices of archaeological and other learned works, publication will eventually cease through lack of support, for already the majority of scholars and students are unable to buy many of the books they badly need, and costs are still rising.

H. W. FAIRMAN

Kharga Oasis in Prehistory. By G. CATON-THOMPSON, with a Physiographic Introduction by E. W. GARDNER. London (Athlone Press) 1952. Pp. xx+213; 128 plates and 38 figures in the text. £3. 10s.

It is a matter for general congratulation that the long-awaited report on Miss Caton-Thompson's important work carried out in Kharga in 1930-3 should at last see the daylight, and in such a handsome volume. The reviewer refrains from the use of the word 'sumptuous' which, used by the author in a review of his own work *Early Khartoum*, made it difficult for him to obtain adequate funds for the publication of the sequel. And yet that this was not her intent is demonstrated by the fact that the fine volume produced by a sister university press has been the model for the Athlone Press, who are to be congratulated on another fine volume. Congratulations, too, to London University for their part in the production, and especially to the far-sighted Director of the Institute of Archaeology for ensuring the retention in England of the bulk of the Kharga material for the use of students.

The discovery of the Badarian civilization between 1922 and 1925 by Guy Brunton and the author led to the latter prosecuting her research into the origins of the Predynastic culture in Egypt by excavating in the northern Fayyūm from 1924-8. This resulted in the identification of the Fayyūm Neolithic industry, which proved, though related, not to be closely akin, to the Badarian; and so, after Brunton had claimed the Tasian culture as a separate entity preceding the Badarian, it was natural that her intention to follow up the Fayyūm work by investigations in the Libyan oases should lead her to choose Kharga, the nearest oasis to the scene of the Tasa-Badarian discoveries.

In the upshot, the quantity of palaeolithic material found was so great that the excavators had to devote most of their attention to it, although it is discoveries in the neolithic field that are of particular interest to readers of this journal.

Both the scarp and the fossilized mound-springs in the depression below the scarp were made to yield evidence as to past climate and the activities of man. It is remarkable that the earliest stone tools in Kharga should be evolved Acheulean, and that they should include several types found at Omdurman (Khor Abu Anga), where evolved Acheulean may also be the earliest culture. Dr. L. S. B. Leakey, in a recent review, has claimed that all the Khor Abu Anga material is Sangoan and not Acheulean. Would he then include Kharga in the Sangoan province too? At Kharga the Acheulean is followed by an unbroken series: Acheulio-Levalloisian, Lower and Upper Levalloisian, and two local cultures named Levalloiso-Khargan and Khargan, the latter giving way to Aterian, apparently immigrant from the west. Levalloiso-Khargan and Khargan are, like the Sebilian of Kom Ombo, near-final developments of the Egyptian Levallois. Miss Caton-Thompson regards them as approximately contemporary and bearing witness to local independence such as was still found in Egypt in the Pre-dynastic period.

Two later cultures were found at Kharga, but unfortunately the critical one, named the Beduin Microlithic, was not found *in situ*, so that the problem of the succession from the Palaeolithic to the Neolithic in Egypt still remains unsolved. There appears, to Miss Caton-Thompson, to be a typological break between the Aterian and the Khargan on the one hand and these two final cultures on the other; but she thinks that there was possibly a direct passage from the Epi-Levalloisian, which occurred at one mound-spring, to the

Beduin Microlithic with its rare transverse arrowheads, comparable to the Sebilian, where phase II contains *trapèzes* and *triangles*. She has no doubt that the Beduin Microlithic preceded her Peasant Neolithic, though she thinks it may have run on contemporaneously and even continued later.

She is tempted, too, to see the origin of the Egyptian Neolithic and early Pre-dynastic bifaced tools in the Aterian foliates; so there may be a kind of continuity there as well. Her Peasant Neolithic, with its flaked axes, planes, rare concave-base arrowheads and sherds, stone-lined hearths and grinders (possibly only for ochre, though they are interpreted as being evidence for agriculture) is considered to be roughly contemporary with the Amratian, from its similarities to Armant; the conclusion being that advancing desiccation drove the Khargans into the Nile valley, where they learned to make sickle blades and other unifacial types. The distinction between bifacial and unifacial types appears to have no significance at Kharga, for the use of tabular flint often rendered bifacial working unnecessary. This is interesting in view of the frequent use of tabular rhyolite by the people of the Khartoum Neolithic at Esh-Shaheinab. With Miss Caton-Thompson's surmise that 'the Khargans and Tasa-Badarians shared a common ancestry, the source of which will remain obscure until Nubia, Ethiopia and lands to east and west of them have been further explored' the reviewer is in full agreement; and he will be interested to hear to what extent she thinks his *Shaheinab*, now in the press, throws light on that common ancestry.

The chief importance of this fine volume is the contribution it makes to our knowledge of the prehistory of Egypt; but readers will also find a valuable summary of the history and archaeology of the oasis in historic times, with a survey of the evidence for Egyptian activities then. Kharga does not seem to have been worth penetration until the New Kingdom, and was probably not colonized until Dyn. XX. Egyptianization increased between Dyn. XXII and the Persian conquest, the earliest known buildings being the Dyn. XXVII temple on what may have been the site of an earlier shrine.

A. J. ARKELL

Griechische literarische Papyri. By W. SCHUBART. *Berichte über die Verhandlung der Sächsischen Akademie der Wissenschaften in Leipzig*, Phil.-hist. Klasse, Band 97, Heft 5. Berlin, Akademie Verlag, 1950. Pp. 108. DM. 13.25.

This book, we are told, suffered considerably from the war, a fact which is apparent in external details. It is printed on poor paper, and was affected by some technical limitations. Doubtful letters could not be indicated by the conventional dots; they are printed in italics, which are in some cases difficult to distinguish from ordinary Greek type (compare the two sigmas at 7. 12). Reference to the text is not facilitated by Professor Schubart's frequent practice of relegating all word division to the notes, which are in small type and separated only by dashes.

These shortcomings, though annoying, are not important, and we must sympathize with Professor Schubart, who is their victim and not their cause. So distinguished a papyrologist deserves better presentation; so do new literary papyri.

The collection includes 6 epic fragments, 9 fragments connected with drama, 3 extracts from anthologies, and 15 prose fragments, several oratorical and one (42) an addition to the 'Acta Alexandrinorum' (cf. P.Oxy. 2177, of which S. here presents an edition).

The first four fragments are *Homerica*. (3) gives a division of the *Odyssey* into 40 'days'; (4) is a discussion on Homer, doubtless in dialogue form; cf. σὴν ὑπόθεσιν in line 32. (1), dated third/second century B.C., presents a problem for which S. can find no parallel. It is a passage from the *Odyssey* written out; each hexameter occupies two lines; the division is irregular, and could have served no conceivable metrical or educational purpose. One is compelled to think of some limitation of column width here, or perhaps in the text from which this was copied. Fuller description or a photograph would be helpful: (a) it would be useful to know the amount of blank space preserved to the right of the first few line-endings extant; (b) it seems strange that the beginning of line 8 alone among the first nine line-beginnings is preserved.

Of the epic fragments (7) (Callimachus?) contains considerable remains of 27 lines. But these offer a bewildering variety of context; S. complains of 'die beständigen Wechsel der Bilder'. More can be obtained from a shorter piece, (8), which evidently deals with the *causa belli Troiani*. Its style is critical, not narrative; Paris is a κριτής ἀδικός in line 8. Line 3 is puzzling: κουρι]δίους λάθρ' ἔμπορος εἰς ὑμενηίου[s. Paris comes to Sparta as a trader (S. quotes parallels) and finds Menelaus absent; cf. perhaps Eur. *IA* 76 ἔκδημον

λαβὼν Μενέλαον. S. is unhappy about the applicability of the term *κουριδίους ὑμενίους* to Paris' rape of Helen. One thinks, of course, of the *ὑμέναιον*, *ὅς τ' ἐπέρρεπε γαμβροῖσιν αἰδεῖν* (Aesch. *Ag.* 707), but the difficult word here is *κουριδίους*. I would suggest *κρυπταδίους* as a better completion; cf. *Iliad*, 6. 161. Line 9 *ἔμολεν κρίσις*, of the judgement of Paris, recurs in Eur. *Hel.* 676; this repetition is perhaps 'striking', but not necessarily significant.

(18) and (19) are tragic fragments. In (18), following hard on the mention of *θρήνοι* (by the chorus?) comes the actual lament (of Medea); cf. e.g. *Soph. El.* 81, 86. (19) contains mention of Odysseus, and it is possible that *πολυρραφή* in line 25 may be active (like *δολορραφής* in Nonnus) and refer to him. If we accept the punctuation of the papyrus we have a harsh change of speaker in line 3; *πρὸς δὲ τοῖσδε* is a very abrupt formula of interruption. S. thinks naturally of a Philoctetes tragedy.

The first fourteen lines of (21) relate how ambassadors are sent on a mission (*ἀξιόσωντας*) to Scyrus; the names of Odysseus and Lycomedes occur. We have here probably the sending of Odysseus and another hero to summon Neoptolemus, to whom line 11 *οἰκία τρεφομεν* refers. This is the subject-matter of Sophocles' *Skyrioi*, as conjectured by Tyrwhitt, quoted and accepted by Pearson, *Soph. fr.* II, p. 192 f. But one may reasonably complain of the boldness of Professor Schubart's title, 'Kommentar zu Sophokles Skyrioi': the Sophoclean plot is conjectural; lines 15-28 of the papyrus deal with different subject-matter, the only link being the name Odysseus (line 24); and an ingenious suggestion of Professor Snell is appended, that the papyrus may really consist of notes on two passages in the *Iliad*, 19. 326 and 20. 53.

28. 9 ff. (an anthology) reveals that Eur. *Meleager*, fr. 529 *ὥς ἡδὺ δούλοις δεσπότης χρηστοὺς λαβεῖν καὶ δεσπότησαι δούλον εὐμενῇ δόμοις* is paralleled closely in both Menander (monost. 556) *ὥς ἡδὺ δούλῳ δεσπότην χρηστοῦ τυχεῖν* and Philemon, whom the papyrus quotes: *δεσπότης χρηστοὺς λαβεῖν . . . δούλον εὐμενῇ λαβεῖν*.

It is a relief to find a fragment which raises few problems. (36) contains some 25 lines of vigorous oratory on the advantages of military discipline. In line 31 *δυσάσματα* (duplications) appears to be *ἅπαξ λεγόμενον*. It would be an advantage to have a list of new words like this and e.g. *βασκαντήρ* (7. 23) in addition to the index at the back, which I have found reliable.

Professor Schubart is to be congratulated on the edition and annotation of these new fragments.

G. W. BOND

Les Inscriptions grecques du Temple de Hatshepsout à Deir el-Bahari. By A. BATAILLE (Publications de la Société Fouad I de Papyrologie, Textes et Documents, X), 1951.

M. Bataille here publishes those Greek inscriptions, painted and inscribed on the walls of the sanctuaries of the upper terrace of the temple of Hatshepsut, which he himself saw and copied in 1936-7. In so doing he adds one more to the already considerable list of works by French Egyptologists on the late inscriptions of the temples of Egypt and Nubia.

The terrace of the temple was sacred in Hellenistic and Roman times to Amenothès and to Imhôtep-Asklepios, and the inscriptions consist of *προσκυνήματα* of pilgrims, and almost no tourist-graffiti occur. B. gives in his introduction a satisfactory general account of the re-use of the sanctuary and of the syncretized deities to whom it was sacred, and is able to show, by reference to the important ostrakon, the complete text of which was published by him in *Étud. pap.* IV, 1937, pp. 125 ff., that the new worship and the acceptance of Amenothès by the Greek population was effected not later than 261-260 B.C.

The inscriptions themselves, which, so far as can be determined from the writing, seem to be almost equally Ptolemaic and Roman, have individually little historical interest, though in gross they attest the popularity of this syncretized healing-cult among the local population of the left bank (there are few foreigners, and the proper names are predominantly local). They are, however, for the most part so illegible that few would care to dogmatize either regarding the detailed reading of many of the proper names or in many instances regarding the precise meaning of the whole inscription. Nevertheless B. has rendered a valuable service in making these scrawls available before they became wholly illegible, and he deserves particular credit for persevering with such unrewarding material.

P. M. FRASER

Paléographie romaine. By JEAN MALLON. *Scripturae monumenta et studia* III, Consejo superior de investigaciones científicas, Instituto Antonio de Nebrija de filología, Madrid 1952. Pp. 188 and 32 plates in photo-gravure.

There is a good reason why M. Mallon's book should be reviewed in this *Journal*. It is not only an important book in its own right, but its argument and iconoclastic conclusions are based in a pre-eminent degree on finds made and published under the auspices of the Egypt Exploration Society. Two papyri from Oxyrhynchus are the most important witnesses cited out of a host which are normally neglected or excluded, but which the writer calls in to build up a balanced and complete picture of a 'Roman' rather than a 'Latin' palaeography.

Though almost every page contains a comment or argument of palaeographical interest, since M. Mallon's is a lucid and well-ordered mind, what will strike most readers is the destruction of received doctrine. The author formulates a set of notions for the study of writing, and then examines the hand of *PSI* 1183. In the light of the knowledge there won on 'ductus', he analyses *P.Oxy.* 30 = B.M. Pap. 745 (dated by him for acceptable reasons c. A.D. 100) and *P.Oxy.* 668 = B.M. 1532 (the *Livy Epitome*). With the sole exception of *a*, whose form is based on current Greek practice, all the letter forms in the latter can be regarded as 'graphical' developments from the former, granted that the surface of the writing material is tilted in relation to the writer. Mallon then proceeds, on the basis of what he has established, to destroy the dogmas of palaeographers. Three, in particular, go down: (1) the schematic series capital (*elegans* and *rustica*)—uncial—half uncial, especially in the form which claims chronological reality for this series, and traces the development of the later members out of the earlier; (2) the received distinctions between and definition of majuscule and minuscule; (3) the view that uncial is a fourth-century development intended especially for Christian texts.

Mallon's destructive and anarchic arguments, though based on a small number of texts, are strong and, to the reviewer, convincing. There can be no doubt that his examination of 'ductus' is sound and helpful, for instance. But he is not helpful in finding something to replace what he destroys. He speaks of an 'écriture commune', a phrase which may be convenient but seems to the reviewer to gain no authority or validity for the palaeographer from its occurrence in the *Codex Theodosianus*, where the content of 'communes' is negative, defined relatively to its antithesis, *litterae coelestes*, the script of the imperial chancery. This 'common writing' Mallon conceives as varying either in the direction of greater formality (e.g. for publication of a notice) or of less, in the case of hastily written texts. But this 'common writing' took different forms at different periods, as Mallon's argument about the development of imperial chancery script implies. Until he gives a more positive lead to fill the vacuum due to his iconoclasm, for practical purposes we can hardly avoid using the old labels, just as Greek papyrus palaeographers (reprehensibly but understandably) apply the term 'uncial' to a round book hand, even of Ptolemaic date.

One who is more at home in Greek palaeography than in Latin may perhaps make two points. The first, of minor importance, concerns the writer's tools: the Latin scribe seems frequently to have used a soft reed (or metal?) pen, giving broad as well as fine strokes, the Greek stuck to a hard point, to which I can think of only two exceptions. With his hard point, however, the Greek scribe could and did draw a vertical in an upward direction, a 'ductus' which, according to Mallon, the Latin scribe never made. Secondly, Greek palaeographers now agree to distinguish 'styles' of writing, and are also agreed that several 'styles' may be contemporary. For instance, in A.D. 200 a book might be written in at least four 'styles', all of which deserve the term 'bookhand'—in an informal round style, a formal round, a 'Bible uncial', or in the 'severe' or 'sloping oval' style. The determining factor in the growth of these styles, why one should be chosen in preference to another, are obscure questions, likely it seems to be explained on other than 'graphical' grounds. A similar search for classification by style in Latin might be helpful.

E. G. TURNER

Who Was Who in Egyptology. By WARREN R. DAWSON. Pp. x+172. Published by The Egypt Exploration Society, London, 1951.

Who Was Who in Egyptology consists of short biographies of persons no longer living who have been connected with the development of our knowledge of Ancient Egypt. It ranges from the middle of the seventeenth century until the present day, and includes travellers, consuls, missionaries, dealers and Egyptian families, and many others, as well as those who have devoted their lives to the subject.

The biographies contain not only the expected information about the lives and dates of the persons included, but also often give the present whereabouts of their papers, and provide details of the sales and sale catalogues that deal with the disposal of their collections. Indeed for reference purposes the book is indispensable and will inevitably come to lie close to the hand of all those whose work or studies are in any way concerned with Ancient Egypt.

The book, however, is not just a work of reference, it is also a book of deep interest for its subject matter alone. To read through it is to acquire a wide acquaintance with the personal side of the history of Egyptology. The great figures of the past become familiar; while names such as Abbott, D'Orbiney, Westcar, cease to be mere sounds serving to identify famous papyri, and become clothed with life and meaning.

C. H. S. SPAULL

"A book that is shut is but a block"

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